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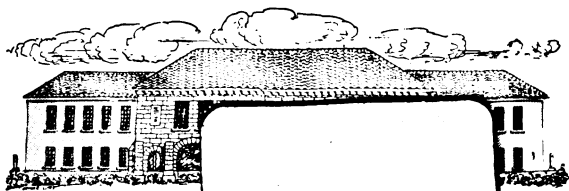
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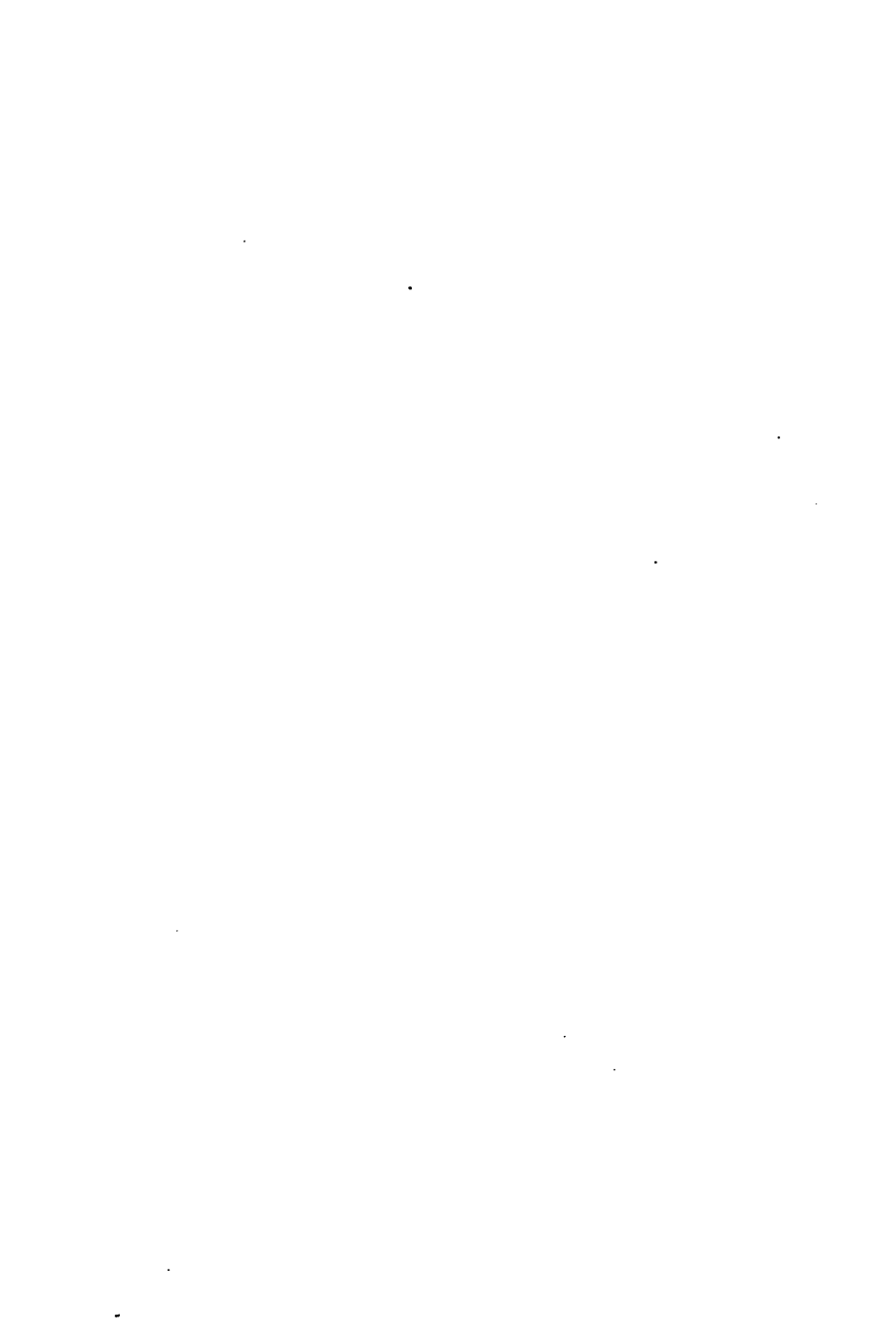
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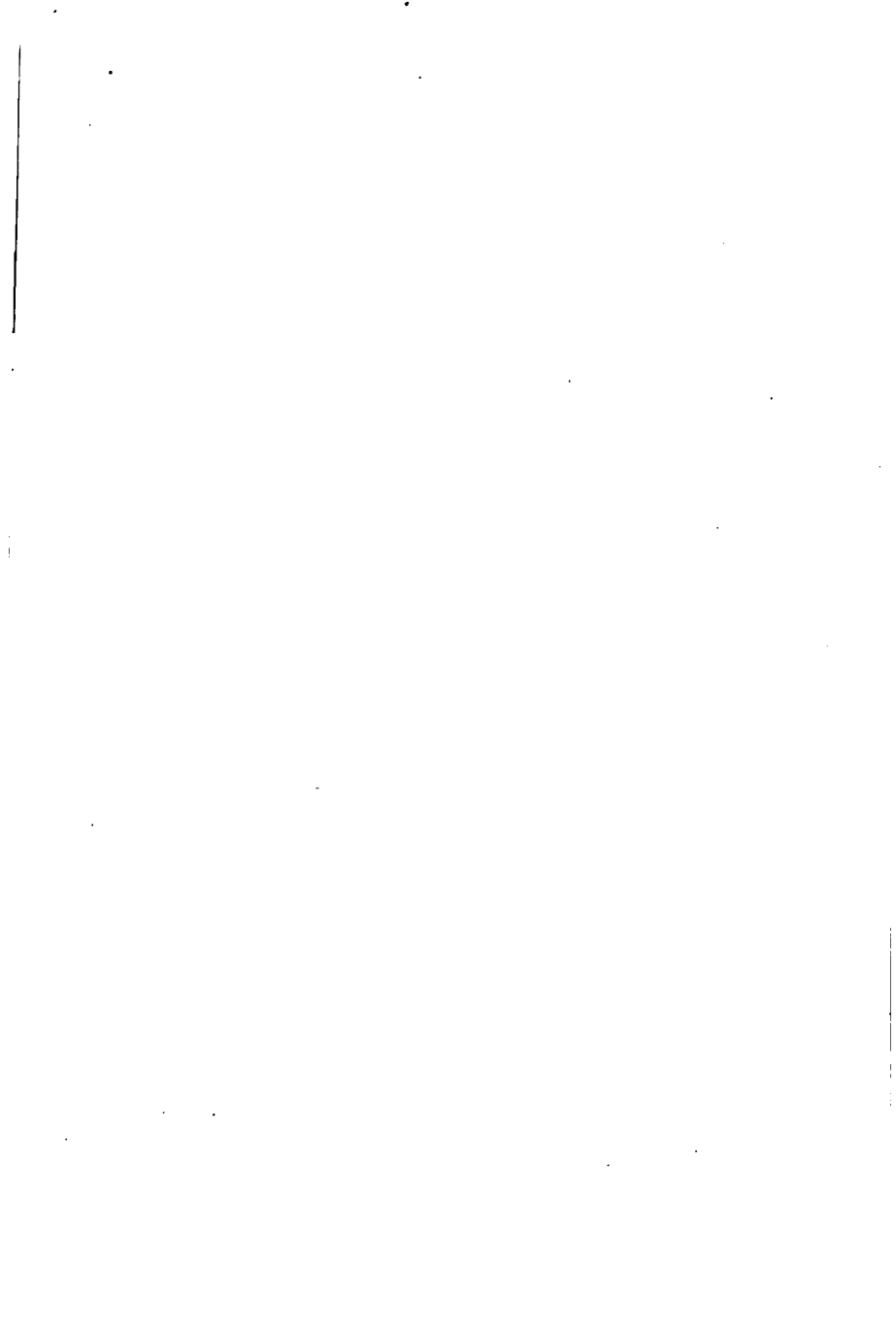
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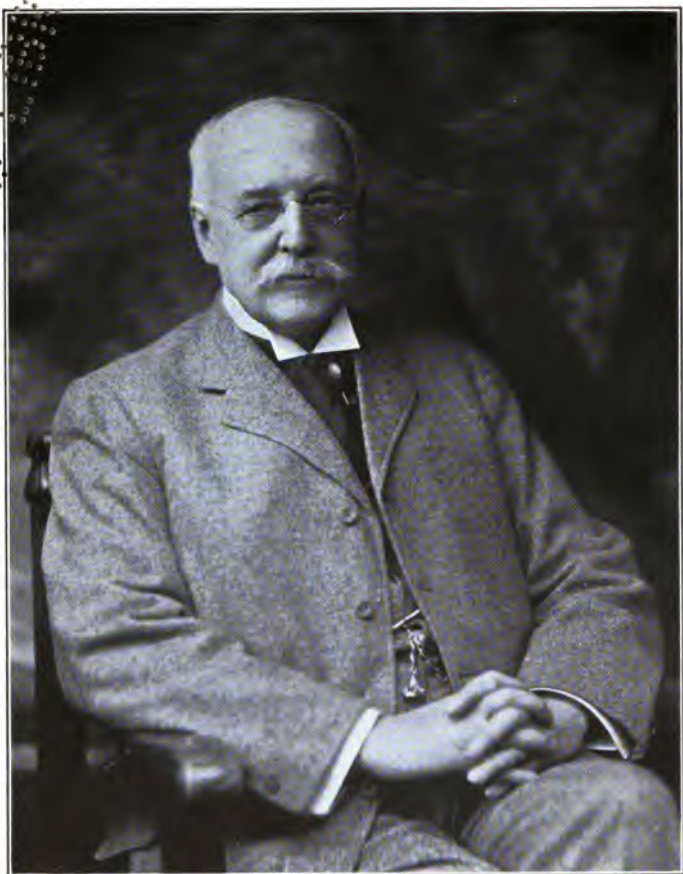
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THE LAW OF THE JUNGLE



Truly yours
J. H. Maxwell

A QUARTER CENTURY OF PUBLIC SCHOOL DEVELOPMENT

BY

WILLIAM H. MAXWELL

SUPERINTENDENT OF SCHOOLS OF THE CITY OF NEW YORK

WITH AN INTRODUCTION BY

NICHOLAS MURRAY BUTLER

COLLECTED BY THE COMMITTEE ON THE CELEBRATION OF THE
TWENTY-FIFTH ANNIVERSARY OF DR. MAXWELL'S SUPERINTENDENCY

STAFFORD - 1903

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PREFACE

It seemed to be fitting that, upon the completion of a quarter of a century of service by Dr. William H. Maxwell as City Superintendent of the schools of Brooklyn and New York, a collection of his educational writings should be made. Dr. Maxwell was therefore persuaded to allow others to attempt a piece of work that his busy days gave him no opportunity to perform and the preparation of this volume has, by his permission, been undertaken by a committee of editors who are responsible for the selection of the papers which are included in the book.

Those who read its pages cannot fail to be impressed, as were the editors, by the fact that many of what we now count the most ordinary and necessary activities of the public school had to be fought for year by year, and sometimes for many years, before they were accepted and made part of our educational system.

THE EDITORS

INTRODUCTION

THE public career of Dr. Maxwell in the cities of Brooklyn and of New York is at once an example and an inspiration. It is an example to those public officers who are without conviction or guiding principle, and whose ears are ever bent to catch the sound of every passing wave of shallow opinion. It is an inspiration to those who are sometimes prone to despair of the conditions attending public service in our American democracy.

Dr. Maxwell affords perhaps the most striking example that our generation has seen of a man of scholarship, courage, and firm principle in high public office. He has had more to do than any other man, or any other hundred men, with shaping the public educational system of New York so that it will be free from political domination; free from the taint of personal influence or privilege, and free from narrow and pedantic formalism. It would be difficult to exaggerate the importance of Dr. Maxwell's life work. The citation of elaborate

statistics might illustrate but would not reveal it in anything like its importance and its wide scope. The worst and most self-seeking elements in the metropolis have persistently opposed Dr. Maxwell and his policies, and have sought, by ways that were dark and tricks that were vain, to humiliate and to defeat him. While this opposition has from time to time harassed Dr. Maxwell, it has never caused him to lose his courage, to weaken his grip upon his principles, or to enter upon the cheap and easy path of compromise. He has gained the fullest measure of support from the press and the best elements of the city's population that any public officer in New York has ever had. Men and women who care for the city's good, and who know what is involved in offering the right or the wrong opportunity for training to the city's children, have looked on with admiration and joy as Dr. Maxwell has fought one successful battle after another for the freedom of the schools, for the enforcement of the highest practicable standards of fitness in teaching, and for making the needs and interests of the children the sole aim of public school policy.

In these days of political stress and storm, when public opinion is blown about like a leaf upon the wind, it is noteworthy that in the city of New York a man of Dr. Maxwell's eminence as scholar, as administrator, and as citizen has been permitted to

spend the long years of an active life in the devoted service of the city and of the city's children.

The publication of this volume is a well-earned tribute to Dr. Maxwell's public service. It reveals only in small part what that service has been, for men are so minded that it is only when the bark of life has put out forever upon the shoreless sea that they are willing to tell all that is in their hearts of their friend. Therefore, the printed records and his published writings are left to speak for themselves.

Of one thing we may be sure: when Dr. Maxwell's task is closed and the time comes for him to lay down the heavy burden that he has so sturdily and so worthily borne, the city of New York will say with one voice, "Well done, thou good and faithful servant."

NICHOLAS MURRAY BUTLER

COLUMBIA UNIVERSITY,
September 18, 1912



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A QUARTER CENTURY OF PUBLIC SCHOOL DEVELOPMENT

I

EXPECTATIONS AND IDEALS

In his report for 1896 Dr. Maxwell summed up what had been accomplished in the Brooklyn schools during the preceding ten years and indicated most of the measures which under his leadership have since been adopted for the improvement of the schools of Greater New York. — THE EDITORS.

(From the Brooklyn Report for 1896)

VACATION SCHOOLS

A BEGINNING will probably be made during the current year, by private effort, to open at least one vacation school. The object is to give kindergarten and manual training instruction to children whose circumstances compel them to spend their summers in the streets. Some years ago, I recommended that this work should be undertaken by the Board of Education, but the suggestion at that time met with no response. My hope is that the experiment about to be tried will so demonstrate the utility of vacation schools that the work will be undertaken on an extensive scale by the Board of Education. If the schools in the poorer neighborhoods were open from 8 to 11 A.M. during the months of July and August, the opportunity to obtain suitable intellectual and manual training thus presented to thousands of children, who perforce spend the long vacation without work and without rational amusement, would be of incalculable value.

SCHOOLS AS NEIGHBORHOOD CENTERS

The idea is gaining ground that there are legitimate uses, in addition to the regular school work, to which the school buildings may be put. For instance, should we ever have a free public library in our city, it would seem specially appropriate to establish branch libraries and reading rooms in central public schools. Then again, there is no good reason why these buildings should not be utilized in the evenings by debating societies and other organizations for self-improvement. The difficulties in the way are insignificant in comparison with the good that would result, and they would easily yield to a slight exercise of executive ability. The public school best serves its neighborhood when it is made the center from which all organized civilizing and elevating influences, except, of course, those that are the peculiar province of the church, shall radiate.

PARENTS' SOCIETIES

Nothing has been more remarkable in the history of the Brooklyn schools than the apathy with which the schools have been regarded by the great body of the people. There are signs, however, that different views are likely to prevail in the future. One of the most wholesome indications of the time is the formation of two societies — one in the district of No. 1, the other in the district of No. 35 — organized to aid and encourage the work of public education in their respective neighborhoods. Such societies, if they are guided by wisdom, may do much to improve the condition of the public schools, and especially to establish those close relations between parent

and teacher that are essential to the proper training of the child. Such societies may lead careless parents to see how deep a concern they have in the education of their children. They will bring home to the minds of many who do not now see it the usefulness of art education, of manual training, and of physical culture. They will take care that the school grounds are planted with flowers, and shrubs, and trees; that school playgrounds are extended; and that the schoolrooms are adorned with suitable pictures. They will secure for the schools collections of plants, shells, minerals, books, magazines, and photographs. They will show their appreciation of good work in the schools; and, when there is criticism to be made, they will make it in so kindly a way as to disarm pugnacity. Above all, they will lead the teacher to see that the school is doing its best work when it is cordially coöperating with other forces for good in the community.

"The mission of the public school," says Superintendent Dutton, "is closely related to all forms of social work. The methods found most successful in dealing with the defective, the vicious, and the neglected classes are such as have been tried advantageously in the school. On the other hand, the methods, aims, and humanitarian spirit of the social reformer are essential to the life of every good school. . . . Teachers must become conscious of the commanding importance of the school as a social factor influencing every form of humane endeavor, reflecting its spirit and aims in the life and conduct of the people, and, in turn, drawing inspiration and help from every department of the world's activity."

EXPECTATIONS AND IDEALS

Indeed, it is only through such a union of all the forces of society that the best results may be obtained from public school work, or even that moderate expectations may be realized. While much of the criticism of the public schools that appears in the newspapers is captious and irrational, while many are disappointed in the schools because they expect too much, yet it is still pertinent to inquire what may reasonably be expected from the schools.

In the first place, it may be reasonably expected that every public school shall keep constantly in view the three great departments of education: physical, intellectual, and moral.

It is only very recently that the elementary schools of Brooklyn have given systematic attention to physical education. Free gymnastic exercises are now given in all classes. This is a great step forward, but it is not all that may be reasonably expected. The public schools ought to provide gymnasias with simple apparatus, large playgrounds, and instructors in organized play. They ought to provide further for the serving of wholesome mid-day lunches in all schoolhouses, to be paid for when the parents are able, and to be given gratis when the parents are not able. The example of Paris shows us that this is perfectly feasible, and that it may be managed without causing the poor child to feel ashamed of his poverty. There is one thing worse than a hungry stomach, and that is the loss of self-respect. Better to have no lunch system than to cause children to lose their self-respect. But Paris has shown us how this may be done.

Again, it may be reasonably expected that all the intellectual work of the school shall be so managed as not to interfere with the physical well-being of the child. Schoolrooms should be well lighted, heated, and ventilated. It is a disgrace to our civilization that the training of children should be conducted in rooms where the air is grossly impure, and where the eyes are sure to be injured. The very statement of the fact that there are such rooms in the schools of Brooklyn should be enough to condemn them. It is surely not unreasonable to ask that immediate steps be taken to place all such rooms in proper sanitary condition, or to replace them with others. I submit that the expenditure of money for this purpose is of vastly greater importance than building boulevards or laying out parks, and will not cost nearly so much. What will a man take in exchange for his health, or even for his sight? Surely not boulevards or parks. Boulevards and parks we want and will have, but we need first that our schoolhouses shall not deprive us of the ability to enjoy them.

And yet again, it may be reasonably expected that the teacher will so manage the intellectual work that it shall not only not injure, but shall actually promote the physical well-being of the child. This will not be the case where the school work is a dull, mechanical routine, and where the child is burdened with a load of matter to be memorized at home — long lists of names without meaning, words without connection, and definitions that are empty shells. Work of this kind simply oppresses the legitimate activities of mind and body, and forces them into illegitimate channels.

In recent years there has been much discussion with regard to the school curriculum, but though new things may be occasionally introduced, it is safe to say that the elementary school course will remain substantially as it is at present. The reason is that our modern civilization demands that all or nearly all the things that are taught shall continue to be taught. As the matter stands at present, the elementary school pupil is supposed to acquire, in addition to reading, writing, and arithmetic, the power of using the English language as a vehicle of thought, to learn something of grammar, geography, and the history of his own country, and to gain some knowledge of the great facts and laws of nature.

It is hardly worth while to discuss this curriculum, because it is now almost universally accepted. What it concerns us to know is the use that is made of these subjects.

Where there is purely mechanical teaching—only memory work—or even where mechanical teaching and pure memory work largely predominate, the subjects of the school curriculum are not properly utilized.

It may, I think, be reasonably expected that these studies shall be so taught, so utilized, as to produce certain results.

First, it may be reasonably expected that the teaching of these things shall be so correlated that one study shall reënforce every other study; that the teaching shall lead to that animation of mind which results in mental promptness to connect one thing with another, to illustrate one thing by another.

Second, it may be reasonably expected that the treatment of these subjects shall be such as shall give to the child the power of doing a thing right, whether that thing

be great or small. The new education, so called, in its revolt against the memoriter-mechanical methods of the schools has too often resulted in careless, slovenly work on the part of children. Yet it is not impossible to combine accuracy with reasonable freedom, painstaking care with spontaneity. However much mechanical methods may be decried, we should always remember that if a child is to write at all, it is better he should write a clear, neat, legible hand; if he is to add a column of figures, that he should add them correctly; that whatever is worth doing at all in school is worth doing right. In a word, it may be reasonably expected that the subjects of study in the elementary school shall be so taught as to produce that concentration of mind on the task in hand which is the prime condition of success in anything we undertake.

Third, it may be reasonably expected that these subjects shall be so taught as to call forth in every pupil a sense of pleasurable activity and of creative power. Probably the keenest pleasure the child feels in school is the pleasure of conquering difficulties. His nature is self-active; and all education should take a lesson from the kindergarten. I look forward longingly to the day when, in addition to drawing, there shall be in all the schools some suitable form of manual training — woodwork for boys and sewing and cooking for girls. The experiment we have seen developed in the Manual Training High School has convinced all who have studied it, that children may devote a considerable part of each day to manual training work, and not only do as much academic work as children do in other schools in which there is no manual training; but that this work is accomplished with much less of mental

strain, with much less danger of producing those nervous disorders to which all children, particularly girls, are liable in consequence of their school work. "The mind is less strained the more it reacts on what it deals with, and has a native play of its own, and is creative. It is more strained the more it has to receive a number of 'knowledges' passively, and to store them up to be reproduced in an examination."

Fourth, the teachers, and particularly the principals of elementary schools, should so use the subjects of the curriculum as to develop the inherent powers of each individual, and should endeavor, after careful observation, to point the way for each child to that course of life for which he is best adapted. We hear continual complaints about the wrong distribution of wealth; how one man is undeservedly rich, and another undeservedly poor; and much of this is possibly true. Indeed, Johnson's noble line is always true:—

Slow rises worth by poverty depressed.

But it is not nearly so much the wrong distribution of wealth that ails society as the wrong distribution of talent. The world is full of misfits, of square pegs in round holes. Surely it is not unreasonable to expect that the schools should do something toward placing the round pegs in the round holes and the square pegs in the square holes. In other words, the special bent of each child's mind should be carefully studied, and he should be trained for that kind of work for which he is best fitted. Primarily this duty belongs to the parent, but it is a duty in which the school should give valuable assistance.

Fifth, it may be reasonably expected that all the school work shall be so conducted as to develop character. Dr. Harris calls attention to the four school virtues which every good school inculcates by its discipline: punctuality, or the habit of being on time for every exercise; regularity, performing duties continuously and systematically; silence, the duty of refraining from unnecessary noise so as not to disturb others; and industry, which may be of two kinds—critical alertness toward the expression of other minds, and undivided attention to the task immediately in hand. It may be reasonably expected that the schools shall, by their practices, cause the growth of these habits—punctuality, regularity, silence, and discipline; but if it stops short with these four virtues, important as they are in the formation of character, it will not have done its whole duty. The school exercises should be so conducted as to produce a love for all things beautiful and good. Drawing is a most useful art to him who possesses it; but the teaching of drawing serves but a part of its purpose, if it does not lead the student to love nature and to understand nature through the interpretations made by art. Reading is necessary to earn a living in our modern world; but unless the reading of the schools leads to a love of good literature it has nothing but the bread-and-butter argument to recommend it. The power to read may lead to all that is unholy, all that is impure; or it may lead to truth, and beauty, and purity. The school work that does not lead to a love of good literature, and particularly poetry, comes perilously near the nature of a crime. "To be incapable of a feeling of poetry in any sense of the word," said Wordsworth, "is to be without love of human nature and reverence for God."

The repression of the vices of selfishness, lying, and dishonesty, is an extremely difficult and delicate work for both parent and teacher. Equally difficult and delicate is the work of developing the higher virtues: truthfulness, generosity, and love — "the greatest thing in the world." It is only teachers of the rarest power who can do much, either in repressing the lower vices or in developing the higher virtues, though all may do something if they will be but long suffering, slow to wrath, and full of tact. Two things, however, are certain: first, no bad man or woman can ever be a good teacher; and, second, any system of appointing and promoting teachers which leads to wire-pulling, fawning, flattery, and selfishness on the part of teachers, diminishes their power for good and renders them in all cases less serviceable, and, in some, a menace, to society.

That such expectations and ideals as I have inadequately described are developing in our teaching force, I firmly believe. Upon their fuller development, not merely in Brooklyn, but throughout this land, more than on any other thing, depend the stability and the elevation of our republican institutions.

II

LITERATURE IN THE GRADES

From this article it will be seen that Dr. Maxwell was one of the first to advocate the study of literature from masterpieces instead of from the dry compendiums or readers then in vogue in the elementary schools.

—THE EDITORS.

(From the Brooklyn Report for 1888)

IN my last report I stated that it had been decided at a conference held between the principals of the grammar schools and the Superintendent "to make the study of literature one of the features of the work in the graduating classes." I stated the reasons for this decision as follows:—

The chief purpose of this measure is to cultivate in our children a love for what is pure and beautiful in literature. There is, as we know only too well, reading matter that is abhorrent to all that is virtuous and noble. The only way to prevent the minds of many children from gravitating toward what is debasing in literature is to cultivate the taste for what is ennobling. I hold that those who confer the power of reading upon children are bound by every moral consideration to do all that is possible to prevent that power becoming a minister of evil. It is hoped that the introduction of this study into the graduating classes will do something to effect this end.

This, however, is not the only purpose. Hitherto it has been the custom to examine the pupils of the graduating classes upon the definitions of words. These words were selected at random from spelling books or dictionaries. To prepare for this examination, the teachers were obliged to have their pupils learn by rote necessarily defective definitions of some thousands of words. The result, very naturally, was, that when the children came to write their answers at the examination, they not infrequently attempted to fit their remembered definitions to the wrong words. The result may be imagined.

It was often too grotesque for description in these pages. The design now is that the words of the reading matter shall be carefully studied, not only as to their meaning in the context, but as to their radical and derivative meanings. Thus the field of work is strictly defined. Time and energy will no longer be wasted. Teachers and pupils will learn that the vital thing is *how* to get at the meaning of words, not the number of words studied. I have a strong hope that the reform thus instituted — I am happy to state, with the unanimous approval of the principals of the grammar schools — will soon extend itself downward through the lower grades.

I may here say that the experiment has resulted most happily. The children in our First¹ Grammar grades are learning to appreciate some of the beauties of literature, and to discriminate between what is good and wholesome in printed matter and what is evil and poisonous. The study, too, is helping their powers of expression. There has been a notable improvement in the compositions written at the graduating examinations since this study was introduced. A few months ago, at the request of the principals, I prepared the following plan for conducting exercises in critical reading, and it has been adopted in all the grammar schools: —

OFFICE OF THE
SUPERINTENDENT OF PUBLIC INSTRUCTION,
BROOKLYN, December 1, 1888.

SCHEME OF WORK FOR CRITICAL STUDY OF LITERARY SELECTIONS IN THE
FIRST GRAMMAR GRADE

THREE READINGS. — Each selection should be read at least three times.

First Reading. — This should be purely for the pleasure of the reading, with attention to elocution and to the general outlines of the plot. Before the reading is commenced, if the selection is poetry, the children should be instructed in the meter, and in reading should be required to emphasize the proper syllables, so that they may learn to appreciate the melody of rhythm.

Second Reading. — This should be for the purpose of dividing the selection into parts, and for gaining conceptions of the various characters.

¹ The highest grade in an elementary school in Brooklyn was at that time called the First Grammar grade. — THE EDITORS.

The division should be made according to some plan, either of place or time, in case of a narrative; or of thought, in case of an argument or exposition.

The pupils should be able to give, both orally and in writing, an abstract of the thought or events in each of the parts into which the selection is divided.

In gaining a conception of a character, the influence of one character upon another, or upon others, should be noted; as well as the influence of the course of events upon each of the principal characters.

In the second reading, passages should be marked for memorizing: —

(a) Passages of striking beauty.

(b) Passages to illustrate peculiarities of the principal characters.

(c) Passages in illustration of the rhetorical figures, *simile*, *metaphor*, and *climax*.

The memorizing of these passages should be made a regular class exercise.

Third Reading. — Meaning and spelling of words; historical and geographical allusions; parsing of words whose concords are obscure, and analysis of complicated sentences, to secure appreciation of the meaning; changing similes to metaphors, and metaphors to similes.

One rule which the teacher should always follow in conducting an exercise in the critical study of literature is, *not to tell the pupil anything that he can find out, or that he can be put in the way of finding out, for himself.*

WM. H. MAXWELL,
Superintendent.

I regret that, except in a few schools, "critical reading" is not pursued to any great extent in the grades below the First Grammar. I would suggest that in all grammar grades principals at the beginning of each term set apart some portion of the reading matter for critical study, as to the subject matter of the selections, their division into parts, the spelling and explanation of words, and the meaning of historical and geographical allusions. Much additional matter should be read, but the habit of reading critically should be acquired early.

This matter of getting at the meaning of words is one in

which our progress is still slow. The old habit fostered through so many years, of making children memorize so-called definitions of some thousands of words—definitions which were necessarily defective in themselves and which could not be accurately remembered because not correlated on any principle of associated ideas—still clings to many teachers. A rational method of leading a child to arrive at a conception of the meaning of a term is one of the last powers to be acquired by even the ablest teacher. The methods of explaining abstract and general terms, by particulars, by synonyms, and by contrasts, lie ready to the hand but are rarely employed; while the method by derivation is an unused art.

- The derivation of words from Latin and Greek roots is taken up in the First grades of a few schools, but is not required in any. When we consider the composite character of the English language; that it is composed of words from many languages, but chiefly from the Saxon, the Latin, and the Greek; and how to know the meaning of one Latin root may give the key to the meaning of a hundred English derivatives, it does seem that we should not fail to take advantage of this labor-saving measure. Indeed, it is not even necessary to go so far back as the Latin or Greek word. All that is necessary is to know the meaning of the most commonly used stems derived from Latin and Greek words. Possessed of this knowledge and an acquaintance with prefixes and suffixes, the scholar has no difficulty in getting at the literal meaning of a word, from which it becomes one of the most entertaining of exercises to trace the derived meanings. I would, therefore, recommend that the study of a certain number of stems,

together with prefixes and suffixes, and of familiar words formed from them, should be required in each of the grammar grades. It is not well to leave this study to the last year of the grammar school course. It requires constant practice and repetition to make it effective. It is not too difficult even for children of the Eighth¹ Grammar grade. An hour a week devoted to this study throughout the grammar course, and the utilization of the knowledge thus obtained in the passing explanation of terms in the reading lesson, would, I believe, result in an accuracy and certainty as to the meaning of words which now I very frequently miss even in the most carefully prepared candidates that come up for the "B" certificate examination.

¹ This was the lowest grammar grade in the schools at the time. — THE EDITORS.

III

THE DUTIES OF PRINCIPALS

Dr. Maxwell subsequently read a paper on this subject before the National Educational Association in 1894. See the Proceedings for that year, pp. 310-321. — THE EDITORS.

(From the Brooklyn Report for 1892)

AS has already been pointed out, our schools are suffering from the presence of too many supervisors that are relieved from the work of teaching. And yet in many of our schools the supervision is neither of the right quality nor sufficient in quantity. Under these conditions I have deemed it right to make a study of the work done by our ablest and most energetic principals, of the work done by principals in other cities, and of the literature on the subject. The result of this study is presented below in the form of a brief summary of the duties pertaining to the principal's office.

The principal of a school ought to be held to a strict responsibility within certain well-defined lines for the administration of the school or schools placed under his direction. He has duties to perform toward his pupils and those in parental relation to them, toward subordinate teachers, and toward his immediate official superior, the Superintendent.

He should, in the first place, be an expert in school sani-

tation. It may not be well to place in the hands of a principal the power to expend money, to make repairs or alterations in the school building, but he should know when the condition of the building is not right and should make life a burden to those who have the power, until defects are remedied. He should have a keen eye to discover physical weaknesses in children, such as myopia or astigmatism, or nervous disorders, and should be skilled to take measures of prevention, if not of cure. Equally keen should be his discernment of intellectual and moral defects, such as poor memory, lack of constructive ability, lying, dishonesty, and the like; and in all such cases it is his duty to devise, if possible, a course of educational treatment to cure the disease. He should endeavor, with the aid of his teachers, to discover particular aptitudes and talents in his pupils and should advise with pupils and their parents as to the most fruitful course of educational work. — I do not refer in this connection merely to the power that ought to be vested in the principal of permitting and encouraging bright pupils to advance more rapidly than their duller companions. That the principal ought to possess and exercise this power, will be conceded. I refer more particularly to the duty of advising as to whether, for instance, a child should stop going to school at the end of the grammar school course, as it is better for many children to do, or whether he should go on through the high school and then through college, or whether he should go to a literary high school, or to a manual training high school. It is, perhaps, doubtful if a principal has a more important duty toward society than this. Socialists and communists, and many who are not socialists as the term is commonly

understood, and who are not communists, complain of the dreadful inequalities in the distribution of wealth. They point to the extremes of poverty and wealth, and denounce the conditions of society which gave them birth or which permit them to exist. The discontent engendered finds vent in all sorts of ridiculous and impossible schemes, from a prohibitory tariff to absolute free trade, from the nationalization of land to an enforced equal division of wealth. But it may well be doubted whether inequalities in the distribution of wealth work as much evil as inequalities in the distribution of talent. It is not at all improbable, even, that the wrong distribution of wealth may be in no small degree due to the wrong distribution of talent. There are college professors who ought certainly to be making shoes or building fences; there are shoemakers who have by nature all the mental and moral qualities to fit them for college professorships. There are principals of schools who ought to be selling ribbons; there are men selling ribbons who ought to be principals of schools. There are men in the pulpit who ought to be driving reaping machines; there are men driving reaping machines who ought to be in the pulpit. What a change there would be, not merely in the distribution of wealth, not merely in the increase in the product of labor, but in the happiness, the morality, the general well-being of mankind, if every man could be set to that kind of work which he can do best! There is no man in the community who can do so much to insure the right distribution of talent as the schoolmaster, if he will but study his pupils and give honest advice to parents. High schools, colleges, and professional schools of all kinds might be saved from the

weary and impossible task of endeavoring to educate the unfitted or the incompetent, if principals and teachers would seek earnestly to discover the special bents of their pupils' minds and advise their education along appropriate lines.

Toward the teacher, the principal's duties are manifold. He should know the plan of work in every class. He should know exactly what every teacher is teaching and how she is teaching it. These two things he may find out by inspection and examinations; not stated examinations, but sporadic tests used as elements in teaching. The principal who has to wait until the end of a month or the end of a year to determine by a written examination whether a given stint of work has been accomplished, is lazy and inefficient. The stated monthly examination by the principal is probably responsible for more machine teaching, more injurious cramming, than all other causes combined. The only proper way for a principal to find out what and how his teachers are teaching, is by the diligent exercise of his eyes and his ears. He should inspect by listening to recitations and by examination of the pupils' written work in language and other subjects. I have known the language work of a large school to be revolutionized in a few weeks by the principal's requiring his teachers to send to his office the children's written exercises, after they had been corrected, but before they were returned to the writers. The principal's inspection should be hourly, daily. In it, or in allied work, he should spend his entire time during school hours. When we consider that a principal is required to work only five hours a day, five days in the week, during about nine months in

the year, it is not too much to ask that all such labor as preparation for school exercises, the keeping of records, and the like should be done outside of the regular school hours.

"The ever present question," which the principal should seek to determine, says Colonel Parker, "should be: Are these pupils doing that work in the most economical manner, which is immediately needed by them for their growth and development?" This question the principal should seek to determine not only absolutely with regard to the work of each teacher with her class, but also relatively with regard to the teachers above her and the teachers below her. In the Brooklyn system of schools, each pupil passes through fifteen grades in as many half years and receives instruction from as many teachers. The child receives his knowledge of arithmetic, for example, at the hands of fifteen teachers. It goes without saying that in passing through this course, in changing from one teacher to another, much time is lost, much energy is wasted. It is one of the most important duties of the principal to reduce this waste to a minimum by taking care that the change be made with as little friction as possible and by unifying the work of all his teachers in each subject of the course. The principal should see to it that all the studies in any given grade are properly correlated, that the energy of the pupil is not diverted from the line of least resistance every time he changes teachers.

But, if economy of energy in attaining given results is the object which the principal should have in view, and if inspection and frequent oral examination are the means by which he is to determine what and how his teachers

are teaching, what are the means by which he is to correct faults, to institute better methods, and to stimulate enthusiasm? The chief means are three:—

1. Private criticism — pointing out to a teacher privately — never in the presence of others — what her shortcomings are and how they may be amended. The principal who reports against a teacher without having first made himself thoroughly familiar with the defects in her work and, secondly, having given her abundant warning, criticism, and assistance, fails utterly in his duty.

2. The second means by which a principal may improve the work of his teachers is by giving model lessons. As Colonel Parker well says: "A principal should be thoroughly capable of giving model lessons in every grade in his school and upon every subject taught."

3. The third means is the teachers' meeting. The teachers' meetings should be of two kinds: (1) the general meeting of all the teachers in the school; (2) special meetings with teachers by grades.

The general meeting should be devoted partly to the discussion of general questions of discipline, promotion, and the like, that concern all the teachers, and partly to the discussion of fundamental principles of education, and clothing these principles with concrete illustrations. The best way to conduct such a meeting I believe to be that by which John Stuart Mill, George Grote, and their associates studied logic and political economy. "Our first subject," says Mr. Mill, "was political economy. We chose some systematic treatise as our textbook; my father's 'Elements' being our first choice. One of us read aloud a chapter, or some smaller portion of the book. The dis-

cussion was then opened, and any one who had an objection or other remark to make, made it. Our rule was to discuss thoroughly every point raised, whether great or small, prolonging the discussion until all who took part were satisfied with the conclusion they had individually arrived at; and to follow up every topic of collateral speculation which the chapter or the conversation suggested, never leaving it until we had untied every knot which we found. We repeatedly kept up the discussion of some one point for several weeks, thinking intently on it during the intervals of our meetings, and contriving solutions of the new difficulties which had risen up in the last morning's discussion." If the discussion of sound works on pedagogy and psychology were carried on in this manner under the direction of a thoughtful, energetic principal, each teacher would almost necessarily become a thinker and a discoverer of truth. Until a teacher has learned to think for herself and to discover truth for herself, she will not be able to teach her pupils to think and discover truth for themselves. If, on the other hand, the principal conducts these meetings by assigning lessons to be studied and recited, as by a class of pupils, he is probably doing nothing more than setting a conspicuous example of bad teaching and disgusting his teachers with the study of professional literature.

The grade meeting, on the other hand, should be for the consideration of plans of teaching. To make this work effective and of permanent value, or, if it be inefficient and valueless, to prove its worthlessness, there should be kept a grade book for each grade in which would be entered complete outlines of the work in each subject and sugges-

tions as to methods. If this book be kept systematically, if the results of experiments are carefully noted down, if whatever is found to be faulty in method is so marked and a better plan substituted, the book becomes the most valuable "manual" of work for the teacher. The time has gone by when it was thought necessary to have teaching done in a uniform manner in accordance with a manual issued from the superintendent's office. The grade manual should be prepared by the teachers of the grade under the supervision of the principal, should not be printed, and should be amended whenever new light is thrown either on the subject or on the method.

Other ways there are, no doubt, of improving teachers' work. Commissioner Harris has pointed out somewhere that the art of turning a poor teacher into a good teacher is a heaven-sent gift which some principals possess, but which it is often impossible to explain. But these three methods — private criticism, the giving of model lessons, and teachers' meetings — general meetings and grade meetings — are means that ought to be employed by all principals.

Toward the superintendent, the principal has duties to perform as well as toward his subordinate teachers. They are at least four : —

1. To carry out faithfully and to the best of his ability all rules and orders. An army of teachers can no more be managed without rules and orders than an army of soldiers.

2. To try such experiments as the superintendent may suggest and to report faithfully the results. In this way the principal becomes the most efficient aid to the super-

intendent either in bringing into general use a good method or in preventing the spread of a bad method.

3. To report to the superintendent every new idea or device that he (the principal) has found to work well in his school, so that the superintendent may carry it to other schools.

4. Lastly, and perhaps most important of all, at stated intervals, the principal should report faithfully, honestly, and without fear or favor, on the efficiency of every teacher under his charge. When a teacher is too ignorant or too indifferent to do effective work, when she is beyond the reach of supervision, it is the duty of the principal to say so firmly and manfully, and then if the superintendent finds the principal's judgment correct, the inefficient teacher should be removed by the board of education.

In all this work belonging to the principal, there is one danger he is particularly liable to fall into — the danger of training his teachers to be, or of permitting them to become, mere machines. There is no more serious obstacle to progress than the principal who insists on teachers doing everything exactly in the way he prescribes; who will not permit a teacher to think for herself. Against this peril he must be constantly on his guard. When it becomes or threatens to become a real peril, it is one of the first duties of the superintendent to step in and secure to the class teacher that reasonable liberty of thought and action, without which no teaching can be effective, no system of schools can be progressive.

IV

THE KINDERGARTEN

The tables upon which Dr. Maxwell founded his argument for the establishment of public kindergartens in Brooklyn show that as early as 1887 he began to tabulate the ages of pupils in the public schools and thus to lay the foundation for the researches that have since been made in the matters of "retardation" and "over-age" children. They also show the small beginnings of the high school system of Brooklyn in the so-called Central Grammar School,—an institution which occupied an altogether unsuitable hired building, which had a course of study of only two years, and in which no foreign languages were taught. — THE EDITORS.

(From the Annual Report of the Superintendent of Public Instruction, Brooklyn, for 1887)

THE noticeable thing about the statistics¹ relating to the ages of children in the grades is that, notwithstanding the rule of the Board, that, in admitting children, the older should be given the preference, the number between five and six years of age has increased since 1886, the proportion for that year being 3.11 per cent of the whole number, while for 1887 it was 3.19 per cent of the whole number. Unfortunately, and, I believe, unjustly, the Board has made, to some extent at least, the positions and salaries of heads of departments dependent on the number of children under their care. While this rule continues in force, a premium is placed upon crowding the

¹ In the report two tables were given. — THE EDITORS.

lowest grades with children that would, as a rule, be better off out of school.

These figures should be considered in connection with those which give by grades the number of pupils of each age.

From a study of these statistics it will be seen that the whole number of children between the ages of five and six was 2407; that of these 2245 were in the Seventh Primary grade,¹ while the average age of the children in that grade is 7.1 years. Now, in the statistics, it appears that the average attendance in the Seventh Primary grade for the year 1887 was 10,558, while the average attendance to a class was 67. Assuming that 2245 fairly represents — and I think it is rather under than over the mark — the average attendance for the year of children between five and six years, the proportion of the number of such children to the whole average attendance in the Seventh Primary would have been 20.9 per cent. If, then, all the children between the ages of five and six had been excluded from school during the year 1887, the average attendance in the Seventh Primary grade would have been reduced to 53. It will thus be seen that there need be no difficulty in doing away, after a reasonable time, with the half-day classes and reducing the classes in the lower primary grades to working dimensions. All that is necessary is to enforce the existing rule that the older pupils shall be given the preference, and to fix a date in the future, after which no class shall have on register more than 60 pupils.

The objection may here be raised that as the state law

¹ The Seventh Primary grade was then the name given in Brooklyn to the lowest grade. — THE EDITORS.

makes the legal school age from five to twenty-one years, the Board of Education has no right to exclude from the public schools any child within these limits. But the Board of Education certainly has the right to make the best possible use of the facilities at its disposal ; and, if it can be shown, as I believe it can, that the interests of the schools and the interests of the children themselves will be best subserved by such exclusion, the Board will act entirely within its rights. The proposition, however, is not to exclude absolutely, but only in cases where there is not room for any but children above six years of age ; and certainly the equitable right of the Board to secure the best possible results and to prevent the evils that flow from crowding and from overtaxing the physical and intellectual faculties of very young children, is much stronger than the legal power to admit to the schools children of any age.

The legal objection, if it be of any value, might be offset by a measure which would be of enormous practical utility—the establishment of kindergarten schools for the reception of children between five and six years of age. Some years ago St. Louis established such schools, and more recently Philadelphia followed the example thus set. The following excerpt from the report of Superintendent Long, of St. Louis, is evidence of the results obtained by the introduction of the system in that city :—

That the kindergarten system is naturally an expensive system cannot be denied ; but the cost has been kept within somewhat moderate limits by the low salaries paid the teachers (the lowest in the schools), and the “supply fee” of \$2 per annum, paid by such pupils as can afford it, has a little more than paid for the apparatus and materials used.

The extra cost of the kindergarten system, however, is not fairly represented by the amount expended for salaries of kindergarten teachers, \$33,700,

estimated for the current year, unless it is assumed that if the system did not exist, none of the children now in the kindergartens would be in the school at all. The *extra cost*, therefore, depends upon what the Board would do with the kindergarten children without the kindergartens. Under the present system, children between five and six years of age attend the kindergartens only, and those between six and seven attend the kindergarten and regular primary one half day each. If the Board educated those of the children between six and seven *all day* in the regular primary, excluding those under six, the saving over the present system would be about \$20,000, while if it educated in the regular primary all the kindergarten pupils, including those under six, the saving over the present system would only be about \$8000.

Thus a large part of the expense of the kindergartens is due to the early age (five years) at which children are admitted; but it is in the fact that the kindergarten system (by whatever name it is called), renders practicable and profitable this earlier commencement and therefore longer duration of the school life, that I consider its greatest recommendation lies. It is true that in localities where the school life of the children is not limited by necessity, this consideration may not be important; and judging from observation in such localities alone, it might be difficult to sustain the utility of the kindergartens as a part of the public school system. But there is another very large class in our great cities, whom necessity compels to begin the work of life as "breadwinners" while yet children, and for these, our future citizens, the earlier commencement of the school life, under the refining, educating influences of the kindergarten system (by whatever name it is called), is amply justified by the gravest considerations of public policy.

It may justly be claimed for the kindergarten system that it trains children to habits of obedience and fixed attention; that it makes the eye more accurate, the hand more steady; that it teaches to count, and develops ideas of color and form; that it leads to imitation and invention in drawing and design; that it quickens the sensibilities and sharpens the intelligence. If these claims are well founded, it will readily be seen how much better prepared children would be to enter upon our grade work after a year of such training, than they are at present. The foundation of good habits, both moral and intellectual, would be laid deep and strong.

I would not, however, have any child remain more than a year in the kindergarten school, for the system has its limitations which the educator is bound to recognize. The child plays, and learns unconsciously, through his play; but if the play is continued too long, it begets a habit that is fatal to the acquisition of the habit of work. Superintendent Harris wrote wisely in one of his St. Louis reports: "If serious occupation is made into childish play, the result is that the stage of irrationality is prolonged. If play is suppressed and serious tasks imposed upon the child beyond his ability, the elasticity of youth is broken, and a mechanical drudge is developed. The necessity of play to children is found in the function it subserves. In play, the child acts directly for himself, while in work he suppresses his own subjective inclination for the production of what is useful for others. Play and work should be carefully kept distinct in his mind, and their due proportion carefully preserved. Without work the child learns to know only his caprice, his arbitrary likes and dislikes, and he is training himself for a tyrant. Without play he is learning to have no will of his own and no personal interest in anything — he will become a selfish drudge."

One year, therefore, would be as much as the average child should spend in the kindergarten, but it would be a year well spent.

The only argument in favor of the present system is that even though children between five and six years do not learn much, they are at least kept off the streets, and away from evil associations for a time. There is force in this, but it would be swept away by the establishment of kindergartens.

In the cities I have referred to—St. Louis and Philadelphia—the kindergarten schools were established largely through the munificence of private individuals and societies, though they are now under the control of the educational authorities. Such is, probably, the way in which they will come, if they ever do come, in Brooklyn. And let it not be thought a thing incredible that this should happen. Brooklyn has many wealthy and liberal citizens. Several of them have already distinguished themselves by magnificent gifts to educational institutions at home and in other cities. One has given a splendid endowment to the library of Yale College. And one, it is gratifying to know, has built and endowed, entirely at his own cost, here in Brooklyn, the largest and most fully equipped school for manual training in the United States. Yet it is doubtful if either a college library or an industrial school would be of as much benefit to the people of this city as would a well-organized system of kindergarten schools. More than one half the children who now enter our schools leave before they are twelve years of age. The average duration of their school life is less than five years. Kindergarten schools would extend this term by one year, and probably increase by one third the ability of the pupil to profit by the work of the graded school. He would begin earlier; he would advance more rapidly.

(From the Brooklyn Report for 1889)

In former reports, I have dwelt at some length on the advantage of kindergarten training for very young children. It ought not to be necessary to recapitulate the arguments in its favor. Suffice it to say that all thought-

ful educators are now agreed as to two propositions: first, that six is a sufficiently early age at which to begin the teaching of such subjects as reading and arithmetic; and second, that the years between four and six are most profitably spent in a kindergarten class.

Many of our large cities have incorporated kindergarten classes in their school systems—notably, St. Louis and Philadelphia. In both of these cities, the kindergarten classes were first established by private munificence, and afterwards, when their usefulness was demonstrated, the classes passed under the control of the Board of Education. The history of this movement in Philadelphia, as given by Superintendent MacAlister, furnishes an admirable illustration of what a few public-spirited men and women can do to aid in the cause of common-school education.

A few ladies and gentlemen, feeling the need of doing something for the education of a class of young children which the public schools did not reach, came together in 1879, and commenced the work in a quiet, unostentatious way. A kindergarten was started in the public school at Twenty-second and Locust streets, six persons subscribing \$100 each to defray the expenses. Other kindergartens were opened, and the movement progressed to such an extent that in 1881, the Sub-Primary School Society was incorporated to care for the growing enterprise. Under its management the work grew so rapidly that in 1883 an appeal was made to Councils, which resulted in an appropriation of \$5000 for the maintenance of free kindergartens. In 1885 the appropriation was increased to \$7500; the Sub-Primary School Society meanwhile raising by voluntary subscriptions a sum almost equal to that granted by the city. These appropriations were expended under the direction of the Board of Public Education, which thus came to stand as a sort of foster father to the kindergartens. It was but one step farther to the adoption of the kindergartens by the Board. In 1886 Councils added the sum of \$15,000 to the school budget for the support of kindergartens, and on the first day of January, 1887, they passed from the control of the Sub-Primary School Society to the Board of Public Education and became an integral part of the educational system of the city.

Similar movements, with fair prospects of success, have recently been started in both Brooklyn and New York. I sincerely hope, however, that the Board of Education will not wait for private enterprise to inaugurate this reform. Had we teachers trained in kindergarten work, it would be perfectly feasible to start kindergarten classes at once in several schools in the older parts of the city. In the schools I have in mind, there are now many vacant seats. By the consolidation of existing classes, two or three rooms could be obtained for kindergartens in each school. The only real obstacle in the way of this is the difficulty of finding trained kindergarten teachers. To place kindergarten classes under untrained teachers would be worse than useless. I would respectfully recommend, therefore, that two kindergarten classes be established in the Training School, and that salaries sufficiently high be paid to obtain the two best kindergarten teachers in the country. A postgraduate course of a few months might then be established for those of the Training School graduates who have exhibited particular ability for this kind of work.

From the members of the postgraduate class, teachers could be appointed for kindergarten classes in other schools as it would be found practicable to establish them. Of course it would be necessary to pay the teachers of such classes sufficiently high salaries to induce them to spend the necessary time in preparation.

If we can add from one to two years to the time children spend—in the great majority of cases now quite insufficient—in acquiring those qualities of mind and heart that lead to happiness and success in life, and we can do this, as I

believe we can, at comparatively trifling cost and without interfering with any other necessary part of our educational system, it is surely our duty to do it. Furthermore, I believe that kindergarten work should be introduced in the Training School with a view to its introduction in all schools. I shall close this discussion by quoting the eloquent words of Superintendent MacAlister : —

The secret of the kindergarten is that it never loses sight of the fact that it is dealing with the undeveloped, untrained powers of a little child. It develops the body ; it cultivates the senses ; it strengthens the receptive, and calls into operation the active, faculties of the mind ; it trains the social feelings and makes each member of the little society feel that its happiness depends not upon itself alone, but is bound up with that of all its members. And all this is done by treating the child, not as a machine to be set in motion by the teacher, but as a living, spiritual organism which grows by the free use of its own powers, which gathers force from every effort that it puts forth, and which passes by insensible degrees from the spontaneous play of feelings and desires, to the conscious exercise of faculties that find expression in creating and doing, in the production of forms that are alike useful and beautiful, in the performance of acts that are inspired by love and duty.

(From the Brooklyn Report for 1891)

In my former reports I have endeavored to set forth the advantages of the kindergarten for children of a tender age. Educational experts are now almost a unit in insisting on kindergarten work for children under six years of age, if such children are to be in school at all. I believe it is perfectly feasible to establish kindergarten classes in several of our schools. In the older sections of the city classes might be consolidated in some schools so as to make room for kindergartens. In other schools where there are four or five classes of the lowest primary grade, the children under six years of age might be collected

into one or two of these classes and taught by kindergarten teachers.

The first school in which a kindergarten class should be established is the Training School for Teachers. This should be a model class, so that even if we should not go to the length of training kindergartners, we might be able to impart something of the kindergarten spirit to all our young teachers.

It would be a mistake, in my judgment, to establish kindergarten classes under any but thoroughly competent and trained kindergartners. In order to obtain such teachers it would probably be necessary to make provision for the granting of special certificates for kindergarten work, as is now done in the case of specialists in the high schools.

As soon as the work attained sufficient dimensions to warrant the expense, a special supervisor of kindergarten work would be needed.

(From the Brooklyn Report for 1892)

For the first time in the history of public education in Brooklyn, the word "kindergarten" was, in the year 1892, embodied in the by-laws of the Board of Education. The formation of a model kindergarten class in the Training School for Teachers was authorized. That class has been established and is now in successful operation. The object is not to train kindergarten teachers—for that work we are not yet prepared—but to give the pupil-teachers an opportunity to observe the workings of the system and to imbibe something of its beneficent spirit.

I cannot but regard this event as one of the first importance. I cannot permit myself to doubt that, small as is

the beginning, the seed thus planted will grow until there will be a kindergarten established in connection with every primary school and department in Brooklyn. All who believe in making little children happy, in training them to habits of forbearance and self-reliance, of industry and frugality, of justice and kindness, will strive for this consummation.

There is grave danger, however, of making a fatal error in the initial steps. The proposition has been made that a number of the existing Seventh Primary classes should be converted into so-called kindergarten classes under their present teachers. The idea is that some of the kindergarten "gifts" should be used side by side with the regular grade work. Those who advocate this plan lose sight, however, of two all-important considerations: (*a*) the pure kindergarten is in its very nature adapted only to children between the ages of three and six; and (*b*) the teachers of the Seventh Primary classes, excellent as they may be, have had no special training for kindergarten work. The gifts and games of the kindergarten are suited for children before the age at which reading, writing, and arithmetic are taught. As the violin is admirable only when played by a virtuoso, so the kindergarten is a blessing only when taught by one who has the requisite skill.

I recommend, therefore, that in all schools in which a vacant room can be found, a kindergarten class, under a trained kindergartner, be established; and, as soon as classes in sufficient number to warrant the expenditure shall have been established, that a special supervisor, or director of kindergarten work, be appointed.

AFTER TEN YEARS

(From the Brooklyn Report for 1896)

An appropriation of \$12,000 for the establishment of kindergarten classes was made by the Board of Estimate in 1895 and became available on January 1, 1896. The Committee on Kindergartens is now engaged in selecting a supervisor of kindergartens. It is hoped, when the schools open in September, to organize twelve or fifteen kindergartens in rooms not now occupied by regular classes. . . . It gives me special pleasure to participate in the work of planting the kindergarten in the public schools of Brooklyn, as for the last ten years I have been earnestly advocating this measure.

RESULTS OF KINDERGARTEN WORK

(From the First Annual Report of the City Superintendent of Schools, Greater New York, 1898)

The total number of kindergarten classes in the city is one hundred and one, distributed as follows :—

Manhattan and The Bronx	. . . . .	65
Brooklyn	. . . . .	21
Queens	. . . . .	13
Richmond	. . . . .	<u>2</u>

In these kindergarten classes teachers are employed as follows :—

Manhattan and The Bronx	. . . . .	65
Brooklyn	. . . . .	38
Queens	. . . . .	21
Richmond	. . . . .	<u>2</u>

Brooklyn is the only borough in which the kindergarten classes are organized in the orthodox fashion with a director and an assistant in each class. Some of the kinder-

gartens in Queens are organized in this way. All of the kindergartens in Manhattan and The Bronx and in Richmond have but one teacher in each class. Presumably the plan of organization in the two last mentioned boroughs was adopted for reasons of economy. It is not a good plan, however. One kindergartner cannot successfully carry on the prescribed work of a kindergarten class. She cannot, for instance, successfully provide music and lead a game at the same time. Expert opinion is overwhelmingly in favor of the plan by which each regular kindergartner is provided with one or more assistants. When kindergarten training departments shall have been organized in the New York and Brooklyn training schools for teachers, it will be possible to provide these assistants at a nominal cost from among the kindergartners in training. In the meantime, I recommend that each regular kindergartner be provided with at least one paid assistant. The increased efficiency of the kindergartens that would result, would far more than compensate for the increased outlay.

During the past year the question has been raised whether the kindergarten is accomplishing all or nearly all that its advocates have claimed. It has been boldly asserted that the children who have experienced its training are found to be no better, often worse, fitted for the studies of the elementary school than children who have not had such training; that they do not want to do anything but play, are restive under discipline, indisposed to learn the lesson which every child must learn — that one must do many things he does not want to do — and almost incapable of voluntary attention, without which there can

be no sound intellectual or moral training. While many of these criticisms have come from persons who are mere surface observers, the voice of one of highest authority, President G. Stanley Hall, has been raised not to overthrow, but to reform, the kindergarten. "The lines laid down by Froebel," he says, "have been too narrowly adhered to, to the exclusion of other great educators; the gifts and occupations, and now, worst of all, the sometimes preposterous mother plays, are made the centers of unending metaphysical cobweb spinning, to the exclusion of a vast body of new educational ideas and practices which would bring the kindergartens more closely in touch with the educational life of the present."¹ Under these circumstances it seemed worth while to find out the opinions of the principals of schools in which kindergartens are established, and of the teachers of first-year classes, who have received pupils directly from kindergartens, as to how, during the first year of the elementary school, the work of the kindergarten child compares with the work of the child who has come directly from the home. At my request the Borough Superintendents sent to all schools having kindergarten classes a number of questions regarding the work of kindergarten children.

A careful study of the answers of principals and of at least one teacher in each school which, in the majority of cases, reflect great credit on the writers, seems to warrant the following conclusions:—

1. The opinions of the principals and teachers who have had direct contact with kindergarten children are overwhelmingly in favor of the kindergarten.

¹ *The Outlook*, August, 1899, p. 769.

2. The benefits of the kindergarten are not confined to those children who have had the kindergarten training. Such children unconsciously do missionary work among their fellows in the higher grades.

3. If the kindergarten is to be thoroughly effective and yield a proper return for the money spent upon it, children under six years of age should remain in it not less than one year. There should be a rule to this effect, and promotions from the kindergarten should not be left to the whim or caprice of a principal. In the boroughs of Manhattan and The Bronx, for instance, in the majority of the kindergartens, the pupils remain less than half a year. In the borough of Queens, from which the testimony is unanimously in favor of the kindergarten, the pupils invariably spend a year in that class.

4. The greatest care must be taken in the selection of kindergarten teachers. A kindergarten under a weak teacher is worse than useless, because the pupils are at their most impressionable age. Much of the adverse criticism found in the replies undoubtedly arises from poor kindergarten teaching.

5. The kindergartners need to take to heart President Hall's advice to endeavor to "bring the kindergarten more closely in touch with the educational life of the present."

6. Some principals and first-year teachers, it is only too manifest, need to study the aims, the principles, and the practices, of the kindergarten.

7. The discipline of repression, as distinguished from the discipline of "liberty under law" which still prevails, I am sorry to say, in many New York schools, is so utterly opposed to the spirit of the kindergarten, that it is small

wonder that teachers whose chief mission in life seems to be to repress all spontaneity in their pupils, can find nothing to commend and much to condemn in the kindergarten. They do not realize that for several years play is the child's chief work.

8. Kindergartners are too apt to forget that one of the great missions of all schools is to inculcate the virtues of punctuality, order, and industry.

9. There is need in all schools of a subprimary class that will form, in schools having kindergartens, a connecting link between the kindergarten and the grades, and in schools not having kindergartens will to some extent take its place. The transition from the kindergarten to the lowest primary class is too abrupt.

CROWDING IN FIRST-YEAR CLASSES

The opinion is frequently expressed in the letters quoted above that children under six years of age are too immature to attempt the regular work of the grades. With this opinion I am in most thorough accord. Children at six are, as a rule, fit only to enter the subprimary class of which I have just spoken. Under six years of age, if at school at all, children should be in kindergarten classes. Every child under six should be excluded from the grades, and the most rigorous measures should be adopted to secure correct information about a child's age before he is admitted. Children under six who desire to attend school should be placed in kindergarten classes. Wherever necessary, rooms should be hired for this purpose; or still better, special kindergarten buildings should be erected. This scheme furnishes the most hopeful means of relieving the

horribly crowded condition of the first-year classes. The chief cause of overcrowding is that children who have no business with grade work — children under six years of age — are admitted to the first-year classes. Exclude these children and provide kindergartens for them, and the problem is largely solved.

NOTE. — The recommendation made by Dr. Maxwell that children under six should be excluded from the grades was realized in 1902 when the city charter of 1901 went into effect. That instrument (Section 1056) contains the provision "that no child under six years of age shall be received in said schools except in kindergarten classes."

It is interesting to find that in April, 1912, the public school kindergartens of Greater New York had increased to 845, with 30,278 pupils. — THE EDITORS.

V

MANUAL TRAINING IN THE GRADES

When Dr. Maxwell first took up the subject of manual training in 1887, it is evident that his mind was still uncertain as to its educational value. He was certainly not disposed to accept without demonstration the extravagant claims then put forward in its favor. The following extracts show how he gradually proceeded from doubt to certainty. — THE EDITORS.

(From the Brooklyn Report for 1887)

EMERSON, in his essay on Art, says: —

The child not only suffers, but cries; not only hungers, but eats. The man not only thinks, but speaks and acts. Every thought that arises in the mind, in its rising aims to pass out of the mind into act; just as every plant, in the moment of germination, struggles up to light. Thought is the seed of action; but action is as much its second form as thought is its first. It rises in thought, to the end that it may be uttered and acted. The more profound the thought, the more burdensome. Always in proportion to the depth of its sense does it knock importunately at the gates of the soul, to be spoken, to be done. What is in, will out. It struggles to the birth. Speech is a great pleasure, and action a great pleasure; they cannot be foreborne.

Stripped of its poetical dress this passage expresses the truth that thought must needs find means of expression; and that the means is of two kinds—speech and action. By action is meant either pursuing a line of conduct or embodying an idea in concrete form, as a piece of sculpture or architecture. Thus a Dante gives expression to his thought in the “speech” of the “Divina Commedia”; a Napoleon, in the “action” of planning a campaign or fighting a battle; a Michael Angelo in the “action” of chiseling

the statue of Moses or painting the Sistine Chapel. The advocates of manual training, or what is sometimes called industrial education, claim that it is as essential to train the hand to express thought by "action" as it is to train the power of speech. This, however, is a much more logical statement of the position which the advocates of manual training may successfully maintain than that which they usually adopt. Thus I find John D. Ford, U. S. N., Principal of the Baltimore City Manual Training School, stating boldly that "the training of eye and hand is as important as that of the brain"; and that "a boy is learning as much when he is swinging the sledge as when he is studying the rules of proportion." A little reflection would have shown the gentleman that, as the brain guides the hand, brain training and hand training are not to be contrasted nor even separated; and that unless the boy has planned something in his head which he is striving to execute with his hands he learns no more by swinging a sledge than he would by swinging a dumb-bell. In other words, it is the expression of thought in action that trains, not the mere action itself.

Somewhat more logical is what Superintendent Compton, of Toledo, Ohio, says of manual training :—

It is purely educational in its object. It first teaches the pupils to portray in the drawing a variety of beautiful and useful forms, and then to embody these forms in wood, clay, and metals. It teaches how to express thought, not in words alone, but in things. It produces nothing for the market except well-trained minds, seeing eyes, and skillful hands.

And again :—

It dignifies and exalts labor, and teaches respect for the laboring man; it teaches no special trade and yet lays the foundation for any trade, and gives the youth such knowledge and skill that he becomes a sounder and better judge of men and things in whatever business or profession he may engage.

Ignoring the obvious *non sequitur* in the last clause of the last sentence quoted, we may remark that the sweeping generalization contained in the first part of the quotation is founded upon but a meager field of observation. Superintendent Compton is himself the authority for the statement that only 300 boys in the great city of Toledo are in attendance upon the manual training school. In all probability these boys were selected, or they elected, to attend the school because of a special aptitude for this kind of work. At any rate, it will be wise to wait for more extended observation and more careful experiment, before accepting so wide an induction. Moreover, there is ambiguity in the statement. "It teaches how to express thought." What thought? The pupil's own? If so, the conclusion is at least partially true. But if the thought of another, it is probably false; for in that case—the case of reproducing a model—what the pupil is learning is, not to express his own thought, in which the value of the training lies, but the purely mechanical part of the work in which there is little or no training. To illustrate: A boy designs a box of a certain pattern and then makes it with the tools at his disposal. Here is training, because it is the expression of thought in "action." But if, on the other hand, the work is planing a board to a given thickness, he may perform the task with the utmost accuracy and yet not have his mind quickened in the slightest degree. I do not say that learning to plane a board is not a good discipline. It is a good discipline, as far as it goes; but the question for the educator to consider is whether this discipline, altogether necessary to the carpenter, is essential for all. Upon this point I prefer to let Superin-

tendent Harris, of Concord, Mass., perhaps the most philosophic mind engaged in public school work in this country, speak : —

I do not think that the instruction of branches of manual training can be justified on the ground that they are of disciplinary value and especially developing to the intellect, but if desirable at all their introduction must be defended on the ground of their general utility to the pupil as a future means of livelihood.

As to the other claim set up by Superintendent Compton that "it (manual training) teaches no special trade and yet lays the foundation for any trade," it is very effectively disposed of by Dr. Harris in the following:—

Special training in one branch of manipulation gives the muscles a set in one direction and unfits the workmen for other employments. The training of a blacksmith unfits him for a jeweler. The work of a carpenter unfits him for a lacemaker. In general, the trades that deal with the metals and wood unfit one for the manufacture of textile fabrics, for the latter requires delicacy of touch.

And again :—

To teach all the boys manual training — and "manual training" includes only some of the manipulations of woodwork and metal work, as it is taught in the specially so-called manual training schools — to teach all boys manual training is to teach twelve times as many as are required.

This last quotation I have made to support the view that the simpler operations of woodwork and metal work embrace nearly all that the advocates of "manual training" mean by the term. In another part of the article from which I have been quoting, Dr. Harris says, "The studies at present in the schools hold their place by reason of their general character." This I believe to be the true test : Is the study general or universal in character? It may be general in one or other of two ways, or in both

— of practical value in life or of disciplinary value. Arithmetic is a manifest example of a study that is directly practical and indirectly disciplinary; and grammar of one that is directly disciplinary and indirectly practical. Now working in woods and metals cannot be regarded as universal either from the practical or the disciplinary point of view. Therefore working in wood and metals should not be a part of the school curriculum which all should be obliged to study.

On the other hand, I am disposed to think that sewing and cooking come within the category of things universal, and therefore might, perhaps ought, to be introduced in all our schools. There is no woman who does not upon occasion require to use the needle; and a more widely diffused and scientific knowledge of the art of cooking would add enormously to the healthfulness and comfort of the people. The teaching of these arts might, I think, be introduced in all our schools without disturbing the equilibrium of the work or adding materially to the expense.

It is the decay of the apprenticeship system that has led to this agitation for manual training. The agitation expresses what is really an urgent need — the need of special schools to teach trades. A school of this kind has been established in this city through the munificence of our fellow citizen, Charles Pratt, Esq., and it will doubtless become a most important adjunct to the public school system. As to the grammar and primary schools, it has been the policy of the Board to confine their work to studies universal in their application; and I believe that this policy should be continued, at least until we know more about in-

dustrial education than has yet been demonstrated by experiment. But even here manual training is not neglected. It is pursued in the only way that it has yet been demonstrated it can be pursued to be universal in its application — in connection with the work in drawing. This affords a discipline for the hand and eye, useful to all persons and under all circumstances. It is made the medium of expressing thought in "action," not merely by copying from models, but by the recombination of old forms in new and beautiful designs.

If working in wood and metals with the tools employed in these crafts is to be introduced anywhere, it should be in connection with the scientific-mechanical course I have suggested for the Boys' Central School. As the students of this institution are permitted to elect their course of instruction, there is as good reason for allowing them to select scientific and mechanical work as there is for the languages or the commercial branches.

There are some boys who do not take kindly to the ordinary work of the schools. From these the ranks of our truants are largely recruited. As there is something abnormal in their character, so they require a peculiar training. For such boys the carpenter's bench would probably do much more than the arithmetic and the geography. How the training of these boys should be conducted must, however, be matter for future consideration.

At present, this discussion must be largely theoretical. The attitude of Brooklyn will be conservative. When the experiments I have suggested shall have been successfully accomplished, it will then be time enough to consider any large scheme of manual training.

SEWING AND COOKING

(From the Brooklyn Report for 1889)

During 1889, an attempt to establish Saturday sewing schools for girls was defeated by a small majority in the Board of Education. There is, however, a constantly growing sentiment in favor of making both cooking and sewing an integral part, as they certainly are a necessary part, of the education of girls. I have always been of the opinion that Saturday schools constitute the best means of teaching such branches. If, however, it be impracticable to establish such schools, I am satisfied that it would be better to take time from other studies, to teach sewing and cooking, than not to teach them at all.

The argument for sewing and cooking is susceptible of brief statement. All school work should be a preparation for life. The destiny of the majority of girls is to be wives and mothers. No small part of their business in life is to manage households. In the conduct of the average household, a knowledge of the arts of sewing and cooking is indispensable. When the mistress is wanting in the scientific knowledge of either sewing or cooking, her work is the merest drudgery. Whatever will elevate a necessary duty of life from a drudgery to an art, is a legitimate part of school work. Apart, moreover, from this practical side of the question is the culture side: conscious activity in production is as essential to true education as is the accumulation of knowledge. Sewing and cooking would provide a sphere that is now sadly lacking, for such conscious activity.

SEWING

(From the Brooklyn Report for 1895)

The Board of Estimate in 1895 appropriated \$5000 for the introduction of the teaching of sewing during 1896. This sum has enabled the Board to secure the services of a Director of Sewing and four assistant teachers. With this force we have been enabled to introduce the work into about one third of the girls' classes in the grades from the Second Primary to the Fifth Grammar inclusive—from the beginning of the fourth to the close of the sixth year in school. The introduction has been accomplished without friction. The work promises to be both interesting and useful to the girls.

Here again, as in the case of drawing, the aim should be to train the class teachers gradually to teach sewing as they teach other branches and to keep the number of special teachers at a minimum.

As soon as it is possible, through an increased appropriation, to extend the teaching of sewing throughout the grades specified, an effort should be made to teach cooking to the girls of the higher grades. There is greater educational value in cooking than in sewing; and nothing taught in the schools is of greater practical worth. The general diffusion of a knowledge of scientific cooking would improve the health, the comfort, and the morals of the entire community. It is the best way to teach true "scientific temperance."

NOTE. — It was not until 1902 that carpenter work for boys was introduced in the grades in Brooklyn. — THE EDITORS.

CHANGES IN MANUAL TRAINING COURSES RECOMMENDED

(From the Greater New York Report for 1908-1909)

The opposition on the part of conservative teachers and unthinking citizens to manual training in the grades has practically disappeared. The workshop for boys and the kitchen for girls have become integral parts of the elementary school. Wherever there is a school without this equipment—and there are still many such schools—there is now a sustained agitation on the part not only of teachers but of parents to obtain it. The Board of Estimate and Apportionment has granted a considerable sum of money for next year to equip shops and kitchens in buildings not yet provided with them. This money will be available after January 1, 1910, for the purpose for which it has been appropriated, and it should be put to immediate use.

The victory for manual training for girls was easily won, because sewing and cooking are practical arts which every girl should know. It was more difficult to persuade parents and municipal authorities that it was well worth while to spend money to teach every boy how to use his hands by means of the carpenter's tools. The old arguments—valid as they doubtless are—did not appeal to them. They laid little store by the considerations that a boy's eye must be trained to observe accurately, that his hand must acquire the habit of obeying the behests of the mind, and that working accurately on such a material as wood is admirable as ethical training, because no false or meretricious work can be done without immediate detection and because it generally brings its own punishment. Such arguments, which appealed with irresistible force to pro-

gressive educators, fell on deaf ears when addressed to the general public. But when it was shown that the carpenter's shop in an elementary school is necessary in order to discover mechanical talent so that the boy who has that precious endowment may be guided to the training and the work for which he is best adapted by nature; and when it was shown further that the workshop provides the best possible preparation for vocational mechanical training—that it leads by easy and natural steps to the trade school—then the day was won for manual training in the grades.

I make the following suggestions for increasing the efficiency and extending the usefulness of our manual training courses:—

1. Sewing and dressmaking should be taught to all girls throughout the seventh and eighth years, as well as throughout the first six years, and cooking should be taught in the sixth year and to all girls over twelve years of age in special classes, as well as throughout the last two years. At present the teaching of sewing stops at the close of the sixth year, except in schools in which kitchens are not provided. Where kitchens are provided, cooking takes the place of sewing in the last two years of the course. The objections to this plan are: (1) that many of the girls who most need to know how to cook receive no instruction in the art because they leave before the close of the sixth year; (2) that the skill which the girls acquire in sewing during the first six years is frequently lost by disuse during the last two; and (3) that when the teaching of sewing ceases at the close of the sixth year it stops before its most useful applications in the art of making garments are taught.¹

¹ This recommendation was put into effect in 1912. — THE EDITORS.

2. Sewing and cooking should be taught to all girls in high schools, no matter what course they are pursuing. The idea of the girl as a potential home maker should never be lost sight of during any part of her education.

3. Our shops should be open to all boys over twelve years of age during the afternoon and (for those who choose to come) on Saturday. For the sake of developing all his powers of mind and body, for the sake of discovering the boys who have a natural aptitude for mechanics and as a preparation for industrial work, all boys in the grades who are over twelve years of age should have this training. With our limited shop facilities it is not possible to give all such boys the opportunity between 9 A.M. and 3 P.M.; hence the necessity of using our shops in the afternoons and on Saturdays. The boys themselves will welcome the opportunity, as they look upon their efforts in the shop as recreation rather than work.

VI

THE CONTROVERSY OF 1904

In 1904, Mr. Edward M. Grout, who then held the office of Comptroller, made a labored attack upon the city public school system on the ground of extravagance. "A large saving could be effected," he claimed, by "doing away in elementary schools with so much at least of instruction in special branches as may be required in order to afford pupils and teachers time and opportunity for efficient prosecution of the ordinary common school course of study." The "special branches" against which Mr. Grout directed his attack are: "elaborate courses of study in drawing, construction work, sewing or cooking, in physical training and hygiene, in music, and, during the first five years, in nature study." Dr. Maxwell prepared a report for the Special Committee of the Board of Education appointed to deal with the Comptroller's recommendations. The most significant parts of this report are printed below.

— THE EDITORS.

(From the Report of February, 1904)

NATURE STUDY

1. THE Comptroller includes, among the so-called special branches, the elimination of which, in whole or in part, would cause a saving by doing away with "special teachers," a study in which no special teachers are employed; namely, nature study. Comment is unnecessary.

GERMAN AND FRENCH

2. The Comptroller omits from the list of special branches two studies which give employment to a large number of special teachers, the German and French languages. The

number of German teachers employed last year was sixty-two, at a cost in salaries of \$85,186.68. The number of French teachers employed last year was ten, at a cost in salaries of \$13,499.40. If to the item of salaries be added the cost of the textbooks from which these languages are taught, it will be found that the total expense for the year 1903 was little short of \$125,000, or more than the total cost for special teachers of sewing, cooking, and physical training, combined, which aggregated only \$111,418.56. Why did the Comptroller omit the "special branches" of German and French? Does he regard the teaching of these languages as part of "what is ordinarily called a common school education"? In the judgment of your committee, in case of financial stress the teaching of these languages should be eliminated from the elementary course of study before any other special branch. It is more important that our girls should grow up straight and strong and able to cook a meal and make their own clothes, and that our boys should be sturdy in body and equipped for skilled labor, than that they should acquire an evanescent knowledge of a few French and German words and phrases. Your committee has refrained from recommending the immediate abolition of French and German teaching in the elementary schools only because of the representations of the City Superintendent, who argues with some show of reason that it is not wise in school administration to break too precipitately with the traditions of the past and that, in the case of children to whom English is not a foreign language, to learn the rudiments of a foreign tongue affords excellent mental training and furnishes a valuable mental equipment.

DRAWING AND HYGIENE

3. Two "special branches" which the Comptroller would have us eliminate—drawing and hygiene—are required by the laws of the state to be taught in the public schools of the state. Chapter 332 of the Laws of 1875 provides that industrial or freehand drawing shall be taught in such schools. Sections 19 and 20 of the Consolidated School Law, as amended June 15, 1895, provide for the teaching of "the nature of alcoholic drinks and other narcotics and their effects on the human system" "in connection with the various divisions of physiology and hygiene"; it even goes the length of defining the grades in which the subject shall be taught, the time to be devoted to it, and the character of the textbooks to be used. These subjects, therefore, cannot be eliminated.

THE ARGUMENT FOR THE SPECIAL BRANCHES

4. The other "special branches" which the Comptroller asks to eliminate either in whole or in part are physical training, cooking, singing, sewing, and manual training. A brief statement of the reasons why these subjects find a place in the curriculum and are taught in the schools will demonstrate the ignorance on which the request is founded:—

(a) PHYSICAL TRAINING. — It is the duty of all schools, and preëminently of public schools, to preserve and promote the physical well-being of the pupils. If this duty is not attended to, close confinement in necessarily cramped postures while engaged in school work is dangerous in the highest degree to young children. The medical profession throughout the world are agreed that such confinement

almost necessarily results in weakness of the muscular system, in round shoulders and back, in poor circulation, in poor respiration, in poor digestion, in constipation, and in fatigue and restlessness. These defects, to which city children are peculiarly liable because of their restricted opportunities for free play and because of the confined area of most city dwellings, the school gymnastics are intended to correct. The time devoted to these exercises is fifteen minutes daily, in addition to a two-minute "setting up" exercise given at intervals three times a day. There are no books used in this work. The apparatus employed is secured as a part of the required equipment of each building. There are twenty-six special teachers of physical training. Of these, one gives his time to the ungraded classes and to examining children reported by their teachers as mentally defective; another devotes his time to athletics; while twenty-four are engaged in showing the regular teachers how to conduct physical exercises. Moreover, the relief from sitting in constrained postures and the relaxation of mind after a period of study, which are afforded by the quickening of the circulation and the extension of the muscles that result from the physical exercises, make them a vital part of the intellectual training. Their moral effect, too, is not unimportant. Physical exercises and athletic games (which have been widely introduced in the schools during the recess periods under the direction of the physical training teachers) are the best corrections of those morbid and vicious tendencies to which many children are prone, while they cure intellectual fatigue, diminish restlessness, afford a vent to surplus energy, that would otherwise expend itself in mischief,

and teach respect for authority by inculcating the habit of obedience to the word of command. What Herbert Spencer said on this subject is as true to-day as it was when written nearly forty years ago :—

Those who, in eagerness to cultivate their pupils' minds, are reckless of their bodies, do not remember that success in the world depends much more upon energy than upon information; and that a policy which in cramming with information undermines energy, is self-defeating. The strong will and untiring activity which result from abundant animal vigor, go far to compensate even for great defects of education; and when joined with that quite adequate education which may be obtained without sacrificing health, they ensure an easy victory over competitors enfeebled by excessive study, prodigies of learning though they may be. A comparatively small and ill-made engine, worked at high pressure, will do more than a larger and well-finished one worked at low pressure. What folly is it, then, while finishing the engine, so to damage the boiler that it will not generate steam?

That the physical training exercises in the public schools are serving the purpose for which they are intended is shown by the following letter from Dr. Bremner, one of the examining physicians of the Board :—

HON. WM. H. MAXWELL :

DEAR SIR : It will interest you to know that nearly 95 per cent of the applicants recently examined by me for the Training School were in excellent physical condition. I was especially impressed with the erect carriage of the candidates and, in many instances, with the unusually good chest expansion—evidences of the good results derived from the physical exercises.

Very truly yours,

(Signed)

SAMUEL K. BREMNER.

Applicants for admission to the Training School are, with very few exceptions, graduates of both the high and elementary schools.

(b) COOKING. — Closely allied in its results to physical training and in its methods to manual training, is cooking. This art is taught to girls in the last two years of the ele-

mentary course. It occupies the same time, in the case of girls, that is devoted to shop work in the case of boys. The training it affords in executive work is admirable, while it cultivates those homely virtues that form the foundation of the family and constitute the chief protection of civilized society. The aim of the course is to make every girl a home maker—to know how to make the humblest home beautiful without waste and to prepare the plainest food in a way that shall be wholesome and appetizing without extravagance. There are twenty-seven teachers of cooking now employed. More teachers will be needed as kitchens are provided in the boroughs of Brooklyn, Queens, and Richmond, where this subject was not formerly taught. To discharge these teachers would not result in any saving, because, the last two years of the course being now for the most part organized on the departmental plan, it would be necessary to employ regular teachers in their places. The cost of material used in the cooking classes is \$0.421 per year for each pupil. And yet, small as this cost is, it is proving to be one of the most potent influences in preventing intemperance, in making girls womanly, and in raising the standard of living among our dense foreign population. If the standard of living in the tenements is to be raised from that of the poorest classes in Italy and Russia to the American standard—a consummation to be desired for the good of society in general and for the interests alike of labor and of capital—it will be done through the teaching of home making in the public schools.

(c) SINGING.—There is not to-day, anywhere in the world, a school system worthy of the name that does not

include singing in its curriculum. By singing, the breathing organs are exercised and the chest developed, the voice is trained, and the ear cultivated. Singing music from notes trains the eye to quick perception and the mind to critical judgment. The rendering of songs evokes an intelligent appreciation of the words, and leads to care in their enunciation, and cultivates the feelings. Singing in chorus tends to inculcate discipline of the best kind—that which is voluntary. It requires self-subordination, precision, attention, and concentration, and leads to self-reliance. Music, in a word, has a refining influence on all who are brought under its influence. In a school that has good music are almost certain to be found good discipline, good results in other studies, and an inspiring school spirit. These statements are elementary. Ever since the days of ancient Greece, music has formed part of the education of every highly civilized community. To abolish its teaching in the New York schools, or even to reduce the small amount of time now devoted to it, would be a disgrace to our city. Perhaps, however, Comptroller Grout would not abolish it, but would simply discharge the special teachers of music. But experience has amply demonstrated that music cannot be successfully taught without the aid of specially trained music teachers. Without constant assistance the average class teacher has little power of teaching singing. When, however, the work is carefully outlined, explained, and demonstrated by the special teacher, the class teacher can then carry it on successfully in the daily lessons. In a school in which music is attempted without the aid of a skilled instructor, what do we find? A small number of trashy songs sung with hard, unmusical

voices, vicious tone production, shouting, singing out of tune, bad enunciation of words, and lack of interpretation either of the music or the sentiment: better no music than this. When the cost of teaching music in New York City is compared with similar expenditures in other cities that have attained a high reputation for their school music, it will be seen that it is most economically carried on here:—

Boston	22 cents per pupil
Worcester	19 cents per pupil
Springfield	19 cents per pupil
Providence	30 cents per pupil
Utica	17 cents per pupil
Yonkers	25 cents per pupil
New York	15 cents per pupil

Under these circumstances, your committee cannot recommend either the abolition of the teaching of music or a reduction in the corps of music teachers. Comptroller Grout made no opposition last summer to the spending of \$48,663.50 for music in the parks to entertain the public: why does he begrudge \$72,000 to teach six hundred thousand children to sing?

(d) SEWING. — Every one concedes the value to girls of sewing; to poor girls it is indispensable. Settlement workers bear witness to the improvement that has taken place in tenement-house homes as to the neatness, cleanliness, and comfort of clothing since an effort was put forth not only in the public schools, but by church and charitable organizations, to teach girls to sew, to darn, to patch, and to make their own garments. The work is taught by the regular teachers with the assistance of fifty-two special teachers. The time assigned is one hour per week. The total cost per pupil for material during the first three years

of training is only $44\frac{1}{2}$ cents; in the last five years, only $88\frac{1}{2}$ cents. The educational value of sewing is that which attaches to any form of manual training. This will be considered under the next head.

(e) **MANUAL TRAINING.** — Used in its widest sense, the term includes drawing, modeling, sewing, cooking, constructive work in cardboard or other material, and shop work practice or carpentry. In the restricted sense in which it is used in the course of study, however, it covers only drawing, constructive work, and shop work practice. The question as to whether manual training should continue in the schools really resolves itself into the question, Should the arts be taught in the schools? The science of education answers this question in the affirmative because the arts constitute one of the most important parts of the intellectual inheritance of the race; and any part of this inheritance which the child can understand is appropriate and even necessary subject matter for the schools. But there are more practical reasons which may be considered from the physiological, the educational, and the economic points of view.

Physiology teaches us that the nervous system has two great divisions—the in-carrying nerves, that carry impressions from the outside world to the brain and spinal cord, and the motor nerves, which carry impulses from the brain to the organs of action. The nerve cells of motor areas grow only through exercise. If they are not exercised, they do not grow. Without such growth there is arrest of the mental development that comes from motor expression. A man trained only through book learning is, therefore, only half trained. From the educational

point of view, psychology shows us that two of the child's primary instincts are to construct and to decorate. Instruction in the arts builds upon these instincts. Constructive agencies are the natural means through which the child grows by self-expression. Moreover, this instruction affords the rest that comes from change of occupation in school.

In the second place, manual training is an important element in the development of character. It develops habits of cleanliness, order, system, and perseverance. It holds up as ideals self-reliance, honesty of work, and respect for skilled labor.

In the third place, as the things with which the child comes in contact are for the most part the product of the arts, this school work gives him an insight into the processes by which man has developed his civilization. It tends to cultivate the child as a social being.

In the fourth place, it cultivates the sense of beauty — the power to appreciate what is beautiful and the power to make beautiful things.

In the fifth place, this work reveals the child to himself; it tells him whether or not he has latent talent for the arts. If he has such talent, he will naturally seek to cultivate it and thus improve himself and add to the wealth of the country; if he has not such talent, he will seek some other form of occupation. Instruction in the arts tends directly, therefore, to diminish that most prolific source of economic waste — the setting of men to work for which they are not naturally fitted.

The last sentence naturally leads to the economic reasons for instruction in the arts. These may be briefly stated thus: The economic success of our country, the

continued prosperity of our city, depend very largely on our skilled workmen. The teaching of the arts lays the foundation for the development of skill, points out those whose constructive talents should be specially trained, and thus aids in economic development. To give an education in the schools that trains only for clerical work is as great a mistake from the economic as it is from the educational point of view.

On an average three hours a week, or one eighth of the total time, is devoted to manual training. Most educational authorities are now agreed, however, that from one fifth to one fourth of a pupil's time should be devoted to the training of his motor as distinguished from his sensory nature.

This whole subject of manual training is so important and so interesting that your committee presents at the close of this report the opinions of many of the leading educational authorities of the country which amply support your committee's position.

Such are the arguments in favor of the retention of the so-called special branches. It is preposterous to assert that they interfere with instruction in what have been called the ordinary public school studies. On the contrary, the alternation of work requiring expression with work involving only the reception of knowledge has led to a vast improvement in the results from these studies. Our children read more and read better, have a more rational knowledge of history and geography, and an incomparably greater power of expression than they had twenty years ago. The purely memoriter or rote method of learning has given way to rational methods of teaching.

The elementary course of study in the city has not been for twenty years the course to which Comptroller Grout would now have us return. The reform that has slowly but surely developed in New York City is but part of a movement that has affected the entire public school system of the country. What the results of public education were under the course before this wave of reform set in, to which Mr. Grout would now have us return, is well stated by Professor Hanus, of Harvard, in his "Educational Aims and Educational Values," as follows:—

It was, therefore, quite generally true that the total permanent result of the first eight or nine years of the pupil's school life was the ability to read, but not the reading habit ; the ability to spell and write words, but no power of expression with the pen ; a varying ability to add, subtract, multiply, and divide simple numbers, integral and fractional, but much uncertainty in all other arithmetical operations ; some fragmentary book knowledge of names and places of our own country and of foreign countries ; and some scrappy information relating to the history of the United States.

Most pupils have derived few permanent interests from these first eight or nine years of school life, and those who left school without entering the high school very naturally regarded what they had learned of intellectual pursuits as typical of intellectual interests in general, and felt for them little respect and less regard. Inasmuch as the great majority of the community is composed of those who have not continued their school life beyond the grammar school, it is evident that, for the great majority of the community, education had been only an incident, and not, as it should be, a great leavening intellectual, moral, and social force.

Such is the course of study to which the Comptroller would have us return. His position is analogous to that of the anti-vaccinationist toward the practice of vaccination now universally accepted by medical authorities. In a precisely similar manner he opposes his views to the generally accepted theory and practice of the highest educational authorities. Were there anywhere in the world schools in which it was not thought desirable to make

learning pleasurable, to cultivate the creative powers, to promote physical health and strength, and to make education a preparation for practical life, in such schools Comptroller Grout's views on education would carry weight. They carry no weight in New York.

VII

MANUAL TRAINING HIGH SCHOOLS

In 1890, Dr. Maxwell started the movement for the establishment of a manual training high school in Brooklyn. As will be seen from the following extracts from his annual reports it took some years to convince the educational and financial authorities of the city that his project was wise. The movement resulted in the establishment, in 1894, of the Manual Training High School of Brooklyn — the first school of the kind in Greater New York — after which several other schools have been modeled. — THE EDITORS.

(From the Brooklyn Report for 1890)

IT is sufficiently evident that very soon the present high schools, even with the increased accommodations that are now in course of construction, will not be able to accommodate all of the pupils that will seek admission. The number of pupils graduating during the present year from the grammar schools will be at least 1800, and will probably be nearer 2000. If three fourths of those graduating in June seek admission, it will not be possible to receive them. What is to be done? The solution of the difficulty is to take one of our old buildings and transform it into a manual training school. The cost for the first year need not exceed \$10,000. Many pupils will go to such a school who would not go to one of the literary high schools, because the work will better suit their special needs.

In such a school, two hours a day would be devoted to book work, one hour a day to industrial drawing, and two

hours a day to laboratory or shop work properly correlated with drawing and book work.

For girls there should be instruction in sewing, cooking, stenography and typewriting, and wood carving. For boys there should be instruction in the use of the principal tools employed in wood and metal work, and in the various branches of electricity.

Both sexes would come together in the classes for book work, which would embrace four hours a week at English, three hours a week at mathematics, and three hours a week at physics and chemistry.

The argument that the public schools should not teach these subjects, no longer holds good. We are already teaching Latin, Greek, and modern languages. If we are justified in teaching such subjects, surely we are justified in teaching others that lie so much nearer to the necessities of everyday life.

Nor would such a school be an experiment. The scheme has been fully tried in other places and has been found abundantly successful. In Philadelphia, in Baltimore, in Washington, in Chicago, in Toledo, in St. Louis, in Minneapolis, in St. Paul, and in many other places, manual training schools have been established, and everywhere with very great success, with profound satisfaction to the community, and with manifest benefit to the rising generation.

Such a school would not teach trades. It would, however, teach the principles that underlie all manual trades. It is to be defended on the ground that these principles and the processes in which they are embodied, furnish, when properly correlated with drawing and book work, an

instrument of education not second to any literary education whatever.

The time is ripe for such a school. The pupils are ready to enter. The building can be obtained. The expense will be small; the benefits incalculable.

(From the Brooklyn Report for 1891)

During the spring term last year your Board very wisely, in my judgment, adopted resolutions providing for the establishment of a manual training school, but the failure of the Board of Estimate to appropriate the necessary funds prevented the realization of the scheme.

In advocacy of the proposed plan the Committee on Manual Training prepared a pamphlet setting forth the arguments in its favor. To this pamphlet all who have any doubts either of the wisdom or of the expediency of establishing a manual training school, are respectfully referred. But, really, such a proposition no longer needs supporting arguments. Manual training, as it has been developed in the high schools of Philadelphia, Baltimore, Toledo, Chicago, St. Paul, and other cities, has long since passed beyond the period of experiment. It must be accepted as a great and beneficent addition to the forces of education and civilization.

I have yet to be convinced that, for children under fourteen years of age, any successful system of manual training, except the gifts and games of the kindergarten and "form study and drawing" as it is found to-day in our schools, has been worked out. But, for children of fourteen — the age at which a boy's arm may be supposed to be strong enough to use a hammer and a saw — the problem

has been most satisfactorily solved. For five or six years the cities I have mentioned have been separately engaged in working out courses of study that properly coördinate book work, laboratory work, drawing, and shop work. The results arrived at are virtually identical. This fact is in itself sufficient evidence that something exceedingly definite and reasonably permanent has been reached.

If such a school were established in the building, corner Court and Livingston streets, when it is vacated by the Boys' High School, the annual expense of maintenance, beyond rental and cost of plant, would probably not exceed \$15,000 per annum. The cost of the necessary plant would probably not exceed \$10,000, and only a part of this amount would be needed at first.

The only argument that has been urged with even a show of plausibility against this scheme is that, while primary children have insufficient accommodation, no more money should be expended on what is called higher education—secondary education would be a more appropriate term. Upon this argument I have to remark, in the first place, that if, as has been repeatedly pointed out, existing accommodations were utilized to the best advantage, they would very much more nearly meet the requirements of the city than they do at present. In the second place, if the children under six years of age were either excluded from our schools, in which they have no business, or if they were placed in kindergarten classes, the pressure in the primary grades would be very much relieved. Under six years of age, it is, in my judgment, an act of cruelty, if not a crime, to subject a child to the close confinement and the severe drill involved in the regular

grade work of a public school. For a child to wait until it is six years of age, or even seven, before entering on our primary work involves neither loss nor hardship. For a boy of fourteen not to be able to find the instruction he requires, involves incalculable loss to himself and loss to the community. If we were obliged to choose — though this is by no means necessary — between teaching the alphabet to infants of five and teaching boys of fourteen how to use their brains in directing their hands, on every consideration of the greatest good for the individual and the greatest good for the greatest number, we should adopt the latter course. In the third place, if we should wait, before establishing a manual training school, until there will be no district in the city without adequate primary accommodations, we should have to wait until the last vacant lot within the city limits shall have been built upon. As long as there are large areas of vacant territory in different parts of the city into which the speculative builder makes his incursions; as long as population, following the march of rapid transit, makes a rush now in one direction now in another, — so long will there be districts in which the school population will exceed the school accommodations. If schools could spring up, like Jonah's gourd, in a night, we might keep pace with the rapid migrations of population; but while it takes from a year to a year and a half to build a schoolhouse, we cannot hope to do so. To argue that we should have no manual training until an impossible condition is realized, is not a fair argument.

The movement for manual training is the protest of the people against the hide-bound conservatism of the schools; it is the demand for what will be of practical value as opposed

to what is merely or largely ideal; it is the cry of thinking men and women to schoolmasters and school boards: Stop the memorizing of useless details and teach our children to form habits of industry; train their minds to plan and their hands to execute.

A manual training school may be operated at an annual expense not greater than that which it now costs to teach Latin and Greek in the high schools.

(From the Brooklyn Report for 1892)

It has been stated that our new high school buildings are already full and that additional high school accommodation is urgently needed *at once*. In the case of boys, this may be provided at a very slight expense by establishing a manual training school in the now unused building on Bedford Avenue, corner of Jefferson. The sum of \$25,000 will fit this building with the necessary furniture and apparatus and pay the salaries of the teachers for a year.

It is unnecessary to reiterate the arguments advanced in my former reports and fully set forth in the report presented to your Board a year ago by the Committee on Manual Training, in favor of a manual training school. Three times your Board has decided that such a school ought to be established, and three times the Board of Estimate has refused to grant the money necessary for its establishment. The conditions, however, are now such, the demand for increased high school accommodation being so urgent, that there seems to be no other alternative. In my judgment, no more money should be spent for high school buildings for boys desiring a purely literary or commercial education, until

some provision has been made for the training of those who propose to make their living by the skilled use of their hands and eyes. While, perhaps, not all has been done that may be done for those who intend to be clerks and merchants and professional men, nothing more should be done until those of the other class, who have hitherto been almost wholly neglected in our scheme of education, shall have been provided with a means of training suited to their needs.

It should not be supposed, however, that a manual training school would be for the purpose of teaching specific trades. Such a purpose would be wholly aside from the object of public education¹ and from the object directly in view in establishing a manual training school. That object is, not to teach trades, but to teach the universal principles — mechanical, scientific, and artistic — which underlie and condition all the mechanic arts, and to impart that accuracy to the eye and that skill to the hand which the successful prosecution of any of the arts requires.

The literary high school, as it is found in Brooklyn and all other American cities, represents a type of school suited to conditions that prevailed universally in a remote antiquity, and that prevail, though in a greatly lessened degree, up to the present time. The manual training school is a type evolved directly from modern industrial society. A community that does not provide manual training for its children is bound to fail in competition with communities that make such provision.

The industrial pursuits of the people, not less than the

¹ As will be seen later, Dr. Maxwell's views as to the propriety of teaching trades in the public schools have been materially modified since this sentence was written. — THE EDITORS.

wealth or the poverty, the social tone, or the political status of society, constitute the environment of the school system. A school system, to subserve the ends for which it is established, must adapt itself to its environment.

(From the Brooklyn Report for 1893)

In 1893, for the first time, the words "manual training" were used in the by-laws of the Board of Education. A by-law was adopted authorizing the appointment of a standing committee of seven members on manual training. This committee was authorized to organize a manual training school in the building, corner of Court and Livingston streets, formerly occupied, successively, by the Central Grammar School and the Boys' High School. Mr. Felix Campbell has kindly given the use of the building rent-free for one year. He did the same some years ago when the Central Grammar School, out of which our whole high school system has grown, was organized. To this gentleman's beneficent public spirit, therefore, must in no small degree be attributed the introduction of manual training into the public school system, as well as the organization of high schools.

The establishment of a manual training school was secured only after an agitation that lasted some years, and after persistent effort to secure requisite legislation from your Board and afterwards to secure a small appropriation from the Board of Estimate. In all this work Mr. Peter H. McNulty took a leading part and rightfully became the first chairman of the Committee on Manual Training.

I must needs regard the step thus taken as one of momentous importance not only to the school system, but

to the city of Brooklyn. It brings us more into line with the progressive educational thought of the times. It brings the schools more into touch with the spirit of the age, which is nothing if not practical.

The school itself was organized in February, 1894, with Mr. Charles D. Larkins, as principal, a corps of efficient teachers, and about 150 students. Should the school receive an accession of students each term equal to the first, it will soon be too large for its present quarters.

Boys alone are admitted to the school. In my judgment, this limitation is a mistake. This school is now the only part of our system in which girls are not accorded exactly the same advantages as boys. Girls should have the same opportunities with regard to manual training that they have with regard to other studies.

The small amount—only \$10,000—granted by the Board of Estimate for manual training was consumed in providing the necessary workbenches, machinery, tools, and apparatus, required for the first half year's work and in making some necessary repairs to the building. As a second set of pupils will enter in September, further expenditures for apparatus are needed without delay.

(From the Greater New York Report for 1898-1899)

There is but one manual training high school—that of Brooklyn—in the city. Manhattan and The Bronx should have two or three such schools, Brooklyn needs at least one more, and, as I have already pointed out, each new high school building in Queens and Richmond should be equipped with a manual training department.

The time has gone by when it was supposed that the

aim of a manual training high school is to make carpenters and blacksmiths out of its pupils. It is now realized that the manual training high school in teaching the use of tools, without aiming at making craftsmen, and in teaching the practical application of science and art to industry, forms the best preparation for life in the case of those who have a mechanical turn of mind and who intend to devote themselves to any kind of manufacturing industry. Experience has also demonstrated that the keenness of observation, deftness of hand, and mental ingenuity developed by the work of the manual training high school constitute the best possible preparation for entrance to a medical school or one of the great scientific schools, such as the School of Applied Science in Columbia or the Institute of Technology in Boston.

The manufacturing interests of the country and of our own city are increasing with marvelous rapidity. We are building railroad bridges in the Soudan and selling our hardware in all the markets of Europe. The opportunities for a boy who understands mechanics, who can devise with his brain, and execute with his hands, are constantly developing. Our boys, if they have the requisite training, will seize the opportunities. The city of New York cannot afford to neglect the mechanical education of her sons. I do not undervalue the work of the literary high school. Though of recent growth in New York as a part of the public school system, it has an honorable lineage that extends back through centuries. But the literary high school does not supply all that is needed in the expanding activities of modern life. The practical demand of the day is not only for young men and young women who have had

the training and culture of the humanities, but for those who have been trained in the activities that form the material basis of modern civilization. Moreover, the experience of the manual training high school shows that school training for mechanical and commercial pursuits is in no way inconsistent with culture of a high order.

VIII

COMMERCIAL EDUCATION

An address delivered by Dr. Maxwell before the Chamber of Commerce of New York and the recommendations contained in his Annual Report for 1898-1899 led directly to the establishment of the High School of Commerce in the Borough of Manhattan—the first high school in America devoted exclusively to commercial education.—THE EDITORS.

(From the Greater New York Report for 1898-1899)

THE city of New York is a great manufacturing center, but it is still greater as a commercial center; it is the commercial metropolis of America. It would seem obvious, therefore, that great attention should be paid in its public schools to commercial education. Yet such is not the case. The commercial courses, for instance, in the Brooklyn high schools are only half the length of the literary courses, and to the commercial courses gravitate the pupils of smallest intellectual attainments.

In the old city of New York practically nothing was done, outside of the elementary course, for commercial education. Nor were the public school authorities of the past altogether to blame in this matter. The merchants and manufacturers of the city have done little or nothing to demand a high standard of education in the boys and girls entering their service from the schools. An extensive in-

quiry has satisfied me that they have not even been careful to see, before engaging them to work, that their employees had completed the elementary school course.

There are signs, however, that our great employers of labor are beginning to see the mistake they have made. The Chamber of Commerce has taken up the matter with enthusiasm and will no doubt coöperate with the school boards to secure the successful establishment of commercial high schools. In an address delivered before that body on November 3, 1898, I used the following language, which I take the liberty of transferring to these pages :—

The two-year commercial courses in the Brooklyn high schools should be abolished, and probably the four-year courses in the Manhattan high schools recently established. A commercial high school should be established in Manhattan, and a commercial high school should be established in Brooklyn. My experience with the work of the two-year commercial courses in the Brooklyn high schools leads me reluctantly to the conclusion that they are not nearly as effective as they should be. They are established in schools in which the largest share of attention is given to the classical and scientific courses. These courses attract the more gifted pupils and the stronger teachers. All the more poorly equipped pupils gravitate to the commercial courses. It will be interesting to observe the development of the four-year commercial courses in the Manhattan high schools. However they may succeed, I am quite sure that two-year commercial courses placed side by side with four-year literary and scientific courses are simply a colossal blunder. Indeed, such a course was abolished fifteen years ago in the College of the City of New York, because it proved an utter failure.

What we need are commercial high schools that shall be wholly devoted to preparation for commercial work. The work of these schools should be based on mercantile experience, and should meet the demands of the time. Not only should commercial arithmetic and bookkeeping, banking, and modern languages be taught, but such subjects as international commerce, the work of the Produce and other Exchanges, the regulation of systems of weights and measures throughout the civilized world, methods of determining quality in grain, yarn, silk, and other staple and commercial articles; the systems of money used in different countries, and systems of exchange; the transportation of goods, railroad fares, and freight rates, ocean transportation of

freight, price quotations, the explanation of the settlement of balances by export and import, a knowledge of merchandise based on the study of natural sciences and determined by instruments of precision, such as the microscope and polariscope; insurance in all of its ramifications; political economy, commercial law, and all other matters which it concerns a merchant in these modern days to know.

The immense progress made by the natural sciences, technology, and transportation in recent years, has given to the commercial profession constantly increasing importance, and rendered it a much more potent civilizing force than in former years; for the work of this profession men specially educated are needed. If the United States are to take the place that their population and their resources demand, in international commerce, men must be trained for commercial work as they are trained for the professions of law and medicine.

The most effective method by which the Chamber of Commerce could strengthen the hands of the educational authorities would be by influencing the merchants of this city to give the preference, when hiring employees, to the graduates of the commercial high schools when they are established. It is such favorable action on the part of employers of labor that has insured the success of the commercial schools that now flourish in all the large cities of western Europe, of which the great school at Leipzig may be taken as a type. And it is these schools that are sending forth the young men, trained to speak and write two or three modern languages and skilled in all the technicalities of commerce, who are competing successfully for the more lucrative positions in the great mercantile establishments of London as well as New York.

The city of New York has the means, if her educational authorities have the wisdom, to establish commercial high schools that will do as much for America as the German commercial high schools have done for Germany.

PROGRESS OF COMMERCIAL EDUCATION

The address which follows was delivered by Dr. Maxwell before the New York Chamber of Commerce in March, 1912. It shows the progress made in commercial education during the years that had elapsed since the founding of the High School of Commerce; and also discloses Dr. Maxwell's attitude toward the agitation to provide elective trade and commercial courses during the last two years of the elementary school. — THE EDITORS.

(From the Monthly Bulletin, Chamber of Commerce, March, 1912)

MR. PRESIDENT AND GENTLEMEN OF THE CHAMBER. — I am highly honored and deeply gratified in again being permitted after a lapse of thirteen years, to address the Chamber of Commerce. When I spoke to you on that occasion I had something very definite to say, because then I had in mind the founding of what was, and is, the first High School of Commerce in North America. Immediately after that address the matter was taken up by the then Board of Education, and pushed to a conclusion, with the result that we have a high school of commerce in the Borough of Manhattan, Sixty-fifth Street, west of Broadway, which has taken the High School of Leipzig very largely as its model; and the equally great High School of Commerce in the Borough of Brooklyn. I am very much obliged to my friend, Mr. Thompson, from Boston, who has acknowledged the indebtedness of Boston to New York. I well remember that visit of a committee of the Chamber of Commerce, Mayor Fitzgerald, and the entire School Committee of Boston, who came to look over this new thing we had established in New York. I recall particularly one little incident that occurred that has always been deeply gratifying to me. They were very welcome to the plan of the school, very welcome to all the sug-

gestions they could find in its administration, but they threatened to do something that we would not have welcomed, and that was to take one of our most distinguished teachers to act as principal in the proposed school in Boston. I have always been deeply gratified that they did not take from us Dr. Sullivan, who is now the principal of the Boys' High School in Brooklyn.

I said at that time when I stood before you, thirteen years ago, that I had a definite plan in mind, which I have been very happy to see realized. I regret that I cannot speak with any definiteness, to-day, as to what may be done for commercial education more than is done in the elementary schools. That plan has not been worked out in my mind, nor, as far as I know, in the mind of any one else. I wish I could tell you just what we need—first, second, third, fourth, fifth, sixth, as Dr. Brown has done for New York University; but that I cannot do, because, for one reason, you have not told us just what you want to have a boy who leaves the elementary schools at fourteen or fourteen and a half years of age know. Fourteen years and a half is the average age of graduation after completing the course in the elementary schools. No one, as far as I know, has ever formulated just what is the most that is reasonable to expect from a boy fourteen or fourteen and a half years old. There are, however, two or three things that I may tell you which you should not expect. You should not expect a boy fourteen years old to conduct a difficult correspondence with a business man with whom you are dealing, and you should not expect him to meet other business men and talk to them as you would, or as your clerks of long experience would. In my

judgment a great deal too much is expected from a boy or a girl fourteen or fourteen and a half years of age; and that is why we established a High School of Commerce, in order that they might have the added training that comes after the elementary school course.

I am not going to tell you what we do in the High School of Commerce, because its distinguished principal, Mr. Sheppard is the next speaker; but there is some talk, at present, of quite a revolutionary change in the last two years of the course in the elementary schools. It has been proposed by some leading thinkers and administrators of educational work that, instead of the time-honored curriculum, which teaches the boy and the girl in the last two years of the course the history and civics of the country, something of English literature, a good deal of arithmetic, a little science, and some drawing—that curriculum which has come down to us through the ages, and which has done great things for this world,—great things, gentlemen,—it has been proposed that we should establish three elective courses at the end of the sixth year, and permit each boy and girl to select his own course. One would be the course pretty much as it is at present, leading to high school, then on to college or the professional schools. Another would be a trade course for boys and girls between twelve and fourteen years of age, in which the rudiments of trades should be taught, possibly with a view of shortening the term of apprenticeship. The third elective course would be a course in business training, for commercial work, for boys and girls of the average age of twelve and a half to fourteen and a half years.

Now, I am not going to say to you, to-day, that this is pos-

sible ; neither am I going to say that it is impossible. I shall, however, lay before you two or three considerations that will show you the great difficulty of realizing in actual school administration a scheme of this kind. The first is the difficulty of securing properly trained special teachers. Now, perhaps I am wrong in saying that, considering the fact that I understand that Chancellor Brown is ready, if you will give him \$200,000, to furnish all the trained teachers we may need ; but I am somewhat in doubt still. This matter of obtaining competent teachers is very difficult and very expensive ; but the first thing to be done before you make any division of that kind, gentlemen, is to secure the trained teacher to put into the elementary schools, to teach subjects that the present teachers are not able to teach. To fail to do that is to kill the whole thing in the beginning. It would be money and time wasted. You must have your trained teachers.

In the second place, it will require, particularly for the trades, a very expensive equipment. We have established two trade schools for boys and girls who cannot complete the elementary school course. The boys and girls that go to those schools are practically a few of the failures at their books, who are now successfully learning trades ; but the equipment of those schools, particularly that for the boys' school in which we teach carpentry, pattern making, plumbing, blacksmithing, electrical wiring, printing, and some other trades, that do not come to my mind at the moment, is tremendously expensive. If it is decided that every boy in the city who reaches the age of twelve and a half should have a chance to take such a course, then the Chamber of Commerce has got to "get busy" with the Board

of Estimate and Apportionment to obtain money to equip and build more schools.

The last and the third consideration is, to my mind, the most difficult and important of all. To carry out a proposal of this kind implies that you are going to ask boys and girls between twelve and thirteen years of age to make up their minds as to just what course of life they are going to pursue for the rest of the years that they remain on this earth. Now, that is a pretty hard thing. Something like fifty years ago President Eliot, of Harvard, was the pioneer in introducing the elective system in Harvard University. He argued strongly and convincingly that teachers in the university would teach very much better when they had only those students who were interested in their particular subjects, and that the students would do much better and harder work if they were permitted to select only those subjects that they cared to study. While I have no doubt that great good has come out of that elective system, there is now a reaction against it. The smaller colleges of this country, and I think rightly, never entirely copied Harvard's plan, and in the large universities — and in Harvard itself to-day — there is a strong reaction against the elective system. And why? Because it has been found that the average young man, from eighteen to twenty-two years of age, is not mature enough, is not wise enough, to select just what he ought to study; and yet we are told that children between twelve and thirteen years of age ought to select the course of education that will mold their future life. Now, that may be possible; but I do not see my way yet to recommend it to the New York City Board of Education. I want, just here, to call your attention to a most interest-

ing and extraordinary experiment that has been tried during the past year under the direction of my friend Herr Kerschensteiner, of Munich. A careful study, largely made by physicians with the aid of teachers, has been carried on there, and every one of the pupils in the Munich public schools who, this year, completed the course, has received a very definite diagnosis of his character, abilities, and tastes, and very definite advice as to the kind of schools in which he should pursue his future studies.

Now, that leads me to say this: There is in my judgment, in the administration of our city, a tremendous anomaly. A vast amount of money is expended for which we are not getting the best results, because of the form of administration. The physicians who inspect our schools are under the absolute direction of the Board of Health. They make, I think, rather perfunctory examinations, a couple of hours a day, or an hour a day, and then go away again. As a matter of fact, one half of the children in our city schools are not examined medically every year. That work, in my judgment, will not be properly done, and such work, wonderful work, as has been done in Munich during this last year, will not be possible in the city of New York, until the medical inspection is transferred from the jurisdiction of the Board of Health to the jurisdiction of the Board of Education. When that is done we shall have the assistance of these physicians in trying to determine the character of the work which each boy is best fitted to pursue, and in trying to advise the boy and the girl as to the course of their future education.

In this connection, too, I should like to throw out another thought. The only continuation schools that we have are

our evening schools. Those schools, in my judgment, have done a great work in this city, particularly our evening high schools, and our classes, which are very large, in which English is taught to foreigners. You would be surprised if you went into one of these schools to see, particularly last summer — we tried the experiment during last July and August, and you will remember how hot the weather was — you would be surprised to see foreigners from twenty to fifty years of age, in their shirt sleeves on those hot summer nights, working in dead earnest to learn to read and write the English language. You would have said, "Those schools are doing good work, and we ought to have more of them."

For the boy or girl who leaves school just as soon as he can, as soon as the law will permit him, and generally long before the elementary school course is over, and is sent to work, the only school is the evening school. Now, this boy of fourteen to sixteen years, who leaves school without completing the elementary school course, does not get a nice job in the office of one of you gentlemen. He looks around, and, with the aid of his parents or friends, takes the first job that comes along, maybe as a messenger boy, maybe riding on the tail end of a delivery wagon, any opening you please. The law requires him to go to school in the evening. He gets out of it whenever he can, and I don't blame him, because he has worked hard for ten or twelve hours all day, and when the evening comes it is time for recreation or sleep and not for study. Now, one of the first great things needed in my judgment in this city is a series of continuation schools for these boys and girls who have left the elementary schools without completing the course. These continuation schools should be

held about six or eight hours a week, and that time should be taken, not out of the boy's time for recreation or sleep, but out of his employer's time during the day. That I believe to be the most important thing to be done in this city in educational work in the near future.

I welcome all worthy coöperation — I am not authorized to speak for the Board of Education of this city, but I risk nothing in saying this — that the Board of Education will welcome any suggestion, any help, any coöperation, that the Chamber of Commerce may give us. And perhaps you will permit me to say that one of the first things, one of the best ways, in which the Chamber of Commerce may help the educational authorities would be to establish, at least as an unwritten law, the custom, that in your offices, when boys apply to you for work, you will say to them, "Have you completed the elementary course?" If one says no, then say, "We advise you to go back to school." If the boy is in the High School of Commerce, or one of the commercial departments of the regular high schools, ask him if he has completed the work of that school. If he says no, you will say, —

"How much of it have you taken?"

"I have taken two years."

"Well, you go back and complete the other year, and then come to me."

If the merchants of this town would insist that the boys and girls whom they take into their offices should complete the work of the schools before they go into business, they would have much better trained clerks than they have now, and they would accomplish more for commercial education than in any other way.

IX

WHY STUDENTS LEAVE HIGH SCHOOL BEFORE COMPLETING THE COURSE

(From the Greater New York Report for 1906)

EXTREMELY difficult it is to determine fully all the causes why so many pupils leave school without graduating. Undoubtedly, however, the chief cause is that many leave to go to work. Probably in the majority of such cases, the hard necessity of earning money is the controlling motive. Such students generally take supplementary courses in the evening high schools. Others there are who leave school to go to work, not because of necessity, but because of that restlessness of mind which comes to all students at the period of adolescence, and which is particularly marked amid the excitements of a large city.

There are many, however, whose leaving school cannot be attributed to either of these causes. The following explanations are approximately true:—

1. Children leave school because they have not the natural ability to cope with high school studies. The number of such children is, in my judgment, small.

2. Children are withdrawn from high school by their parents because the latter fear that their children's health will be injured by what they regard as the excessive amount of home study required by some teachers.

3. Children leave high school because they are bewildered for a time and sometimes scared by a school atmosphere very different from the atmosphere of the elementary school which they left—an atmosphere in which the teacher stands more aloof and in which the pupil is thrown more on his own resources.

4. A few pupils leave before graduation because they find that there are colleges which will receive them, despite their slender academic attainments, into the freshman class.

These statements, I believe, summarize the reasons, as far as they are known at present, why children in such large numbers leave the high school without graduating. It must be the immediate duty of the educational authorities, and particularly of the Board of Superintendents, to remove the causes of dissatisfaction on the part both of parents and of pupils.

In the first place it should be said that where a child, after a fair trial, is shown to possess mental powers of so inferior a nature that he cannot grasp the high school studies, he should not only not be prevented from leaving high school, but he should be encouraged to leave. It is far better for a boy who cannot study Latin and algebra and science to advantage that he should leave school and go to work—provided, however, that the school has nothing else to offer him that will stimulate his dormant faculties into activity. It may be that all such a boy requires is manual training or instruction in a trade. Before we can say definitely that a boy is too dull to pursue high school studies, we must know that he has failed in hand work as well as in head work, in science as

well as in language. Hence I say that the number of students who are so dull is very few. The greatest defect in our school system to-day is that principals and teachers do not guide pupils, in selecting their high school courses, along the lines of their special aptitudes. For instance, a boy who has shown special ingenuity in the use of tools in the shop work class in the elementary school, should be encouraged to go to the manual training high school; the boy who has evinced ability in literature, to the regular high school course, and so on. Some way must be found by which the principals and graduating teachers in elementary schools shall be held responsible for the advice given to graduates as to their future courses.

As to excessive home work there is undoubtedly cause for complaint. The root of the difficulty lies in the fact that each teacher teaches one subject and that some teachers are unreasonable in putting all possible pressure on their pupils to study their particular subjects. When four teachers compete for the home study time of the pupil, there is always the danger that the pressure will be excessive. Such pressure unfortunately bears more heavily on girls than on boys. Because they are so conscientious, girls will try to accomplish all school tasks assigned them. Boys who are given too much to do, simply do not do it, and depend on their wits to get through somehow. Hence this foolish pressure falls most heavily on those who are least able to bear it. *It is the business of the principals of high schools to prevent such pressure.* In many cases, it is only too manifest that the principals have neglected this duty. It has, therefore, become the business of the Board of Superintendents to

devise a plan, by which the principals will be under the necessity of exercising their authority to prevent undue pressure of home work upon their pupils. Such a plan is now under consideration.

Even if the home work, however, were so adjusted that no child would be asked to do an unreasonable amount, there would still remain the difficulty, which many children experience in adapting themselves to a strange school environment and changed methods of discipline and instruction. They have come from an elementary school near their homes; they are now going to a high school a long distance from their homes. They have come from the midst of scenes and faces that have been familiar for years; they are transferred to scenes that are strange and placed among pupils and teachers whom they do not know and by whom they are not known. In the elementary school there was a kindly teacher to smooth over every obstacle and to aid them in every difficulty; in the high school the pupil is thrown — and rightly so, because he is more mature — on his own resources, and too often left to sink or swim by his own unaided efforts. Add to this, that many of the children who enter high school have no place to study their home lessons, except among the noises and confusion of a room which often serves all the purposes of a dining room and kitchen, as well as a living room, for a large family, and we may form some faint idea of the difficulties which confront the child when he enters high school. The difficulties seem to him insurmountable; is it any wonder that he begs his parents to let him leave school and go to work?

Surely, it is our duty to remove the obstacles from the

path of the high school pupil as far as we can, particularly in the first year, for there it is where the greatest tendency to leave is found. I have pointed out one way in which this may be done—namely, by lessening the amount of home work. But this is not all that is needed. The high school pupil, particularly in his first year, needs kindly advice and assistance, not as a unit in a class, but as an individual, a person. He needs to have the weak places not only in his scholarship, but in his character, discovered; and he needs to be shown how to strengthen them. At least he should be made to feel that there is some one who is thinking of him, not as a cog in a great complex machine, but as a human being who is capable of friendship and gratitude. Alike in the small academy and the small college of former days, such sympathy and support were found by the student in president or principal and teachers, who had time and opportunity to become intimately acquainted with each individual student. In the great overgrown city high school, time and opportunity for this most important work are both wanting. And yet it is *work that must be done*, if our high schools are to render their full service to the community.

One way that might be suggested would be to appoint tutors whose sole duty it would be to give individual assistance to students, to advise with them regarding their studies and their amusements, to guide them in their reading, and to assist them in difficulties. Such is the plan which Princeton College has recently put into practice, adopting a modified form of the Oxford tutorial system. There are two serious objections to adopting this plan for high schools. The first is that it does not provide for one

of our greatest difficulties — the fact that a considerable proportion of high school students have no suitable place or opportunity to study their lessons at home. The second is the enormous expense involved. To appoint a sufficient number of tutors to help every high school student individually, would almost double the cost of the high schools — a cost which is already high and which is increasing too rapidly. The third objection is that it would be practically impossible to find a sufficient number of tutors of the right kind. A tutor whose duty it is to guide rather than to teach, must be a person of experience as well as scholarship; he must be possessed of infinite tact, sympathy, patience, and power of reading character. No fledgling teachers would answer for this purpose. Even if we had the money to pay them, teachers possessing the requisite qualities are not to be found in the numbers that would be required. Realizing the impossibility of overcoming these objections, I do not recommend the adoption of the tutorial plan.

What then is to be done? Are we to continue to watch thousands of children leave our high schools each year without obtaining that intellectual training which the high schools can give, simply because the conditions of urban life compel us to erect enormous buildings and organize gigantic schools? Surely not. Our ingenuity ought to be equal to the task of neutralizing the evils forced upon us by the conditions under which we are compelled to work. Without claiming to have solved the problem with which we are confronted, I beg leave to submit the following plan: —

1. Keep the high school buildings open until five o'clock

each afternoon except Saturday, and on Saturday until noon.

2. Require a certain proportion of the teachers to remain each afternoon and to be present on Saturday morning for the purpose of advising and assisting pupils.

3. Permit all pupils who desire advice from their teachers or who wish to study their lessons in school or to read in the school library, to remain for as long or as short a time as they please within the prescribed hours. Only two conditions should be made: parents should in all cases give their consent, and each child who remains should, for obvious reasons, be required to take half an hour's exercise in the school gymnasium.

The advantages of this plan are manifold. It will utilize the school buildings more fully than at present. It will secure to each pupil favorable conditions for study. It will enable him to obtain needed advice and assistance from those best able to give advice and assistance — his teachers. It will afford the teachers an opportunity, through private conference, to obtain an insight into the character of their pupils which they could not gain in any other way, and so will react favorably on the work of the classroom, and, lastly, it may be put into operation at a very slight cost.

Objections to the plan may be expected from two sources — the janitors and some of the teachers. The janitors and their friends oppose any and every plan of school work which will increase in any way their labor. Clamor from the janitors may, therefore, be expected. Opposition on the part of the teachers will come, I believe, only from a small minority. The great majority will favor

any plan that will lead to the retention of a larger number of high school students in school and that will increase the efficiency of the schools. Of course, if additional labor is required on the part of the teachers, there should be proportionately greater remuneration.

A VOCATION BUREAU A MEANS OF RETAINING STUDENTS IN HIGH SCHOOL

(From the Greater New York Report for 1909)

In former reports I have dwelt in some detail on the causes that induce so many students to leave high school before completing the course. Briefly stated they are: (1) the dire necessity of earning money in order to increase the family income; (2) the attraction of good wages even to those who are not compelled by poverty to work; (3) the restless activity which leads boys in large numbers, and many girls, to prefer labor, no matter how humble, to what they regard as the irksome task of learning in school; and (4) lack of intellectual ability to pursue the higher studies. To these causes must be added a few cases in which students leave school because of lack of tact on the part of teachers in dealing with them. The first cause it is difficult to see how to deal with. Charitable assistance is not to be thought of, and any system of scholarships founded on competitive examinations would probably not reach, or reach only slightly, the class intended. The second and third classes would remain in school if the employers of labor in our city would unite in refusing applicants for employment until they had completed a certain amount of school work, or if they would at least give the

preference to those who graduate. It is idle to expect, however, that employers of labor will take such action, though it would be greatly to their interest, until the matter is brought forcibly to their attention. Some work of the most beneficent character has already been done along these lines by a self-appointed committee of high school teachers, under the chairmanship of Mr. Eli W. Weaver of the Boys' High School, Brooklyn. The work thus happily commenced should be officially recognized and greatly amplified. The Board of Education would do well to organize a vocation or employment bureau with Mr. Weaver, who has shown rare capacity for such work, at its head. The special field of labor for such a bureau would be to bring to the attention of employers of labor the various kinds of training given in the public schools, to ascertain from principals and teachers and, in some cases, from the young people themselves, the kind of work for which each is best suited, and to aid in placing each student in a position in which his talents will have scope to develop. The small cost of such a bureau would be a mere nothing compared with the good it would accomplish.

The fourth class of those who leave high school without completing the course—those who are not intellectually able to do, or have no taste for, academic work—should really never enter a high school. They now cost your Board a large amount of money for teachers in the first and second terms of the high school course, who, were it not for their presence, would not be needed. They receive little benefit from attending high school for a few months and would be much better off in a trade school.

The statistics of the past year bear witness to the fact,

to which I have repeatedly called attention, that students leave vocational or semi-vocational courses, such as commercial courses or manual training courses, more readily than they leave the standard academic course. The reason is that those who take the academic course generally do so with the object of preparing to enter higher institutions, and must remain, in order to attain their object, if not to graduate, at least for the greater part of the course; while many of those who take the vocational or semi-vocational courses leave as soon as they receive such a smattering of shop practice or stenography and typewriting as enables them to obtain a situation. For many of the latter class of students our evening high schools become genuine continuation schools. Their leaving school so early, however, is a great loss to themselves and a great loss to the efficiency of our manufacturing and commercial interests. It is believed that the establishment of a vocation bureau such as I have recommended would do much to remedy this great evil by securing suitable positions for deserving and well-prepared boys and girls, and by preventing, through refusal to recommend, the employment of the immature and ill-prepared.

X

QUALIFICATIONS OF HIGH SCHOOL TEACHERS

(From the Greater New York Report for 1899)

INASMUCH as the strongest attacks made upon the license system have been instituted against the requirements just quoted, I think it right to state with some degree of fullness the principles that guided the Board of Education in adopting and the City Superintendent in recommending requirements for high school licenses of a higher order than the requirements for licenses to teach in the elementary schools.

The training of the citizen is the most vital concern of the state. In the secondary schools, or high schools, are trained most of the men who become prominent in the various walks of life, and most of the men and women who become teachers of children in the elementary schools. In defense of property and health, the state sets a standard for admission to the practice of law and medicine. The welfare of the child whose character is molded in the public schools is surely deserving of at least as careful safeguarding. And in elementary education such protective measures have been taken. It was a long step forward—a longer step than has as yet been taken, I believe, by any other state in the Union—when in 1895 the statute

was enacted that no one should be licensed or employed to teach in primary or grammar grades in any city of the state who had not had three years of experience in teaching, or in lieu thereof had not graduated at least from a high school and from a course of professional training of at least one year.

But the work in the elementary school — primary and grammar grades — differs materially from the work in secondary schools, and the qualifications of teachers should differ accordingly. The work of the teacher in the elementary schools differs from the work of the teacher in the secondary schools, first, with regard to the pupils and, second, with regard to the knowledge the teacher is called upon to impart. In the elementary schools the pupils are little children. They are easy to guide and influence. They are impressionable, but forgetful. Mistakes made in their training may be remedied by wiser measures at a later day. In the secondary school, on the other hand, where the pupils vary in age from thirteen or fourteen to seventeen or eighteen, are found adolescents of rapidly developing individuality and force of character, critical, exacting, self-conscious, possessing the sense of personality of adults, but lacking the self-control that is taught by the discipline of life. Errors in training at the period of emotional adolescence, when impressions strike deep and endure long, are almost ineradicable. Mistakes in training during the secondary school age are much more likely to be fatal than mistakes in training during the elementary school age. Hence peculiar tact and energy and insight are needed by teachers who direct and instruct girls and boys of the high school age.

In the second place, the character of the knowledge with which teacher and pupil deal in the secondary school is very different from the knowledge with which teacher and pupil deal in the elementary school, just as in turn secondary school subject matter and methods differ from those of the college. During the elementary stage of school life—say from the sixth year to the fourteenth year—the child seizes upon the world with feeling and with imagination rather than with reason and insight. The knowledge he gains is not a knowledge of isolated facts, and it is still less a knowledge of scientific principles. Relations, as far as they appeal to him at all, are felt rather than perceived,—they are felt as personal to him—to his present interests and needs—rather than thought of as universal in significance. Hence we no longer speak of teaching botany or zoölogy in the elementary school, but of nature study; by which we mean that a child should have lived with nature and learned to love her before he begins to occupy himself chiefly with classifying her phenomena. When the child enters the secondary or high school he has become interested in each of the main fields of knowledge, has gained some command over the tools with which knowledge is discovered and extended, and has, more or less incidentally, learned a vast number of facts—facts of natural science, facts of history, facts of life. The high school or academy, on the other hand, while deepening, strengthening, and extending the student's knowledge, in the field of natural science, for instance, is occupied largely with classification and arrangement and to some extent also with application. The pupil learns to compare and arrange his facts into sciences—botany, zoöl-

ogy, chemistry, physics—and this very process enables him to acquire new knowledge all the more rapidly and thoroughly. In the study of history, too, of mathematics, and of languages, the pupil likewise learns to apply his faculties more maturely, more scientifically, than in the studies of the elementary school. In the college, again, the student may confine himself to a smaller number of studies than he took in the academy or high school, but he goes much more deeply into them; he studies one knowledge in the light of other knowledges; and, what is of still greater value, he is mature enough to comprehend the bearings of what he studies on the problems of life. There are not, to be sure, hard and fast lines separating the elementary school from the high school and the high school from the college. On the contrary, the different divisions shade off into one another so that it is extremely difficult to say where one begins and the other ends. In the last year of the great city high school the work is often distinctly collegiate in character; and, in like manner, the last two years—the seventh and the eighth—of the elementary school are at least half secondary in character.

Now, if I am right in holding that the pupils in the elementary schools are radically different in character from the pupils in the high schools, and that the knowledge to be taught in the elementary school differs from the knowledge to be taught in the high school as empiricism differs from science, it follows that the high school teacher should be not only more extensively and scientifically informed than it is reasonable to expect or require the elementary school teacher to be, but that he should have undergone that training which is needed to fit him to deal as a

teacher with adolescent pupils and to impart organic instruction.

What, then, should the distinctive qualifications of the high school teacher be?

In an address before the Department of Superintendence of the National Educational Association last February, Dr. James E. Russell classified these qualifications under the head of general knowledge, professional knowledge, special knowledge, and technical skill, and I adopt his classification because I cannot think of any other that is better or nearly so good. "The degree of scholarship required for secondary teachers," says the Report of the Committee of Fifteen, "is by common consent fixed at a collegiate education. No one—with rare exceptions—should be employed to teach in a high school who has not this fundamental preparation." The reason is not far to seek: The knowledge to be taught—be it language, biology, mathematics, or what not—is scientific knowledge, and hence the teacher should have studied the languages and the sciences in the light of one another, by the comparative method; the pupils to be taught are in the period of adolescence, "the period of beginnings, a transition period, of mental storm and stress, in which egoism gives way to altruism, romance has charm, and the social, moral, and religious feelings bud and bloom," and hence the teacher should himself have studied the knowledges in their bearings on the problems of life, that he may give wise and adequate guidance to those committed to his charge.

Second, professional knowledge. Here I quote Dr. Russell's own words:—

It is equally important that the secondary teacher be able to view his own subject, and the entire course of instruction in its relations to the child and to society, of which the child is a part. A teacher may be able to teach his subject never so well, may even have the reputation of being a distinguished educator, yet his life long be a teacher of Latin or physics, or history, rather than a teacher of children. The true educator must know the nature of mind, he must understand the process of learning, the formation of ideals, the development of will, and the growth of character. The secondary teacher needs particularly to know the psychology of the adolescent period—that stormy period in which the individual first becomes self-conscious and struggles to express his own personality. But more than man as an individual, a teacher needs to know the nature of man as a social being. No knowledge, I believe, is of more worth to the secondary teacher than the knowledge of what standards of culture have prevailed in the past or now exist among various peoples, their ideals of life, and their methods of training the young to assume the duties of life. Such study of the history of education is more than a study of scholastic institutions, of didactic precepts, or the theories of educationists; it is *Kulturgeschichte* with special reference to educational needs and educational problems. It gives that unifying view of our professional work without which it is idle to talk of a science or a system of education; it prepares the way for the only philosophy of education which is worth teaching.

Third, special knowledge. By special knowledge I mean knowledge of the subject the teacher is to teach. The departmental system has completely taken possession of the high schools. The teachers are supposed to be specialists in their various branches. They certainly ought to be. As a rule, the average college graduate, though he may have the required general knowledge, has not the necessary special knowledge. The normal school graduate certainly has it not. And what a sorry teacher the high school teacher is who has not a thorough, complete grasp of his subject! How can a man be a specialist in mathematics who does not know the higher reaches of his subject? Or a specialist in history, who has read none but school histories? Or a specialist in anything who has to burn the midnight oil in order to learn the les-

son he will give next day to his pupils? Such a man is the slave of the textbook. His sole object is to get his pupils through examinations, not to prepare them for life. Such teachers we do not want in the New York high schools. We need men and women of broad general culture who have also devoted much time to the thorough mastery of the special subject they are required to teach.

This work, however, might well be coupled with the fourth requisite, technical skill in teaching. Here again I shall adopt as my own Dr. Russell's language:—

Graduates of colleges and normal schools alike must fail in technical skill if they teach as they have been taught. The work of the secondary school is unique. It requires an arrangement and presentation of the subject matter of instruction in a way unknown in elementary education and unheeded in most college teaching; it requires tact, judgment, and disciplinary powers peculiar to the management of youth. Herein is the need of that technical skill which is not, as has been well said, "a part of the natural equipment of every educated person."

For the acquirement of this technical skill we must look to our universities and teachers' colleges. Columbia, Harvard, and Brown are taking the lead in this work and, if a demand is created, the other great universities, we may be sure, will lose no time in following their example.

If, then, it is admitted that these four qualifications—general knowledge, professional knowledge, special knowledge, and technical skill—are essential to the successful high school teacher, the defense of the minimum requirements for high school licenses is complete. These requirements provide for precisely these qualifications. The requirement of a college education meets more or less adequately the necessity for general knowledge on the teacher's part; and the recognition of special postgradu-

ate studies, or, in lieu thereof, the requirement of experience in teaching the special branch for which the license is desired, insures the possession of the indispensable special knowledge; while, as for professional knowledge and skill, these are called for, as fully as may be, by the requirement of suitable experience or of professional study. In all cases, candidates for high school licenses are examined on the science of education.

“But,” some one will object, “these regulations prevent the promotion of teachers from the elementary grades to the high school grades.” By no means, I reply, because provision is made for the licensing as high school teachers of persons who have had eight years of experience, provided they show, through examination, that they have pursued the necessary studies and acquired the necessary culture. I regret, however, that the rules do not restrict the selection of such teachers to those who have had experience in the seventh and eighth years of the elementary school, because the work of these years is, as I have pointed out, partially secondary and partially elementary in character. Experience gained below the seventh year of the elementary school I regard as very nearly useless as a preparation for high school teaching; and the younger the children are with whom the experience is obtained, the less valuable for high school purposes does it become. A woman, for instance, who had become thoroughly saturated with the methods of teaching little children in the kindergarten would, as a general rule, be wholly unfitted to deal with the boys and girls of the high school. So different is the attitude of the teacher’s mind toward the infant of five from that which the teacher must

assume toward the adolescent of fifteen. The teacher whose attitude of mind toward a certain type of pupil has become fixed by habit, is practically precluded from the successful teaching of pupils of another type. This is one of the least satisfactory results of the graded school. In the ungraded country school the teacher's mind remains more plastic, because he is called upon to deal with all sorts and conditions of pupils. In the graded school, on the other hand, the teacher is constantly teaching children who are as nearly alike as possible in age, attainments, and character. Hence, under the graded system, the teacher's attitude of mind toward a certain class of pupils is constantly being stereotyped, so to speak. The experiment of assigning a teacher who has become habituated to dealing with very young children to a class of older children is fraught with danger not only to the children, but to the teacher herself.

In addition, however, to seeing that candidates for high school licenses possess the technical qualifications required for eligibility, it has been found necessary to institute somewhat rigorous examinations to ascertain the character of their scholarship and their professional fitness. My experience as superintendent of schools in Brooklyn and as chairman of the Board of Examiners of New York has amply demonstrated that examinations are a necessary safeguard in selecting teachers. All other available means combined—investigation of record in teaching and studies, testimonials, personal interview, observation of work—are insufficient to guard against mistakes in selection. The careful analysis of a candidate's answers to written and oral tests in the subject matter of his specialty and in

the science of education and methods of teaching is an indispensable feature of the inquiry. Take, for example, the teachers in private secondary schools who are now in great numbers seeking admission to the public high schools. The opportunities afforded these teachers for private tutoring have been many and attractive. Under such circumstances the teacher is tempted to spend the time he ought to devote to study in working for money, and his regular stipend has unfortunately adjusted itself to the situation. When such a teacher comes before an examining board, he realizes his mistake. He finds that he has not given sufficient thought to the principles underlying his work, and he finds that he has not the scholarship he wishes he had, and that he now recognizes he ought to have. Within the short experience of the Board of Examiners, it has several times happened that teachers of this kind, failing in a first examination, have responded to the stimulus and in course of time have redeemed themselves by carrying out definite plans of professional improvement. Examinations, when rightly conducted, may thus furnish a stimulus, as well as a test and a standard.

XI

TRADE SCHOOLS

In his Annual Report for 1900 Dr. Maxwell started the agitation which resulted in the establishment of several evening trade schools, which are frequented chiefly by apprentices, in the organization in 1910 of a day trade school for boys — the Boys' Vocational School, and in taking over from its founders the Manhattan Trade School for Girls. — THE EDITORS.

(From the Greater New York Report for 1900)

THE manual training high school, as it has been developed in this country, does not teach trades. Yet there is, I believe, a great necessity for schools that will do this very thing. In our crowded tenement-house neighborhoods there are thousands of boys who must leave school the moment the compulsory education law allows. They have the rudiments of an English education, but they are sadly at a loss as to how to earn a living. It is too often a desperate and hopeless struggle. The education the boy has received has not gone far enough. It has been sufficient to create in him tastes for things higher and better than those which he finds in his sordid surroundings, but it has not been sufficient to give him any art by which he may earn a living. As the old opportunities for apprenticeship no longer exist, a well organized and equipped trade school would be the thing most desirable for such a boy. Not a year should be added to his schooling beyond

the compulsory age if he must then go forth to fight for his living ; but he should be taken out of the elementary school when he has finished the sixth year and allowed to spend the next two years, or until he is fourteen,¹ in learning not only history and composition, but some trade whereby he can earn a living. The city would be amply repaid for the expense of establishing and maintaining such schools by the increased army of skilled workmen they would produce, while they would bring untold blessings to the poor of this city.

Nor need the establishment of such schools add much, if anything, to the cost of the schools. If a large proportion of the boys in the four highest grades of the elementary schools in the tenement-house districts were to elect to enter the trade schools when established, many classrooms would be left vacant which would be immediately filled. In other words, as the proposed trade schools would form a part, not of the high school, but of the elementary school system, the buildings intended for them would take the place of the elementary school buildings which otherwise it would be necessary to erect.

(From the Annual Report for 1905)

Reference has been made in this report to the experiment of utilizing the plant of our manual training high schools in the evening for trade school purposes. The experiment has been upon the whole successful. The work is yet only in its infancy, however. It needs to be systematized and developed.

¹ Dr. Maxwell has, since this was written, modified his views as to the age at which a boy may begin to learn a trade. He now thinks that fourteen is early enough. — THE EDITORS.

The economic necessity for free public trade schools is admirably set forth in an address recently delivered by Mr. Frank A. Vanderlip, of the National City Bank, who, by personal experience and by profound study of economic and labor conditions at home and abroad, is qualified to speak authoritatively on the subject. The following extracts from this address present the chief points of his argument:—

It is true that we are still proud, and have much good reason to be proud, of our success in international competition. We have seen our exports of manufactured products double and double again. We have seen, with justifiable pride, that we are able to make many manufactured articles of commerce more cheaply than any other people in the world can make them. We have combined with the advantage of unexampled supplies of raw material an unequaled genius for doing things on a great scale. With notable clearness we have seen the economic advantages of great industrial combinations. We have been quick to recognize industrial waste, whether in the form of unneeded labor, of loss of by-products, or of unnecessary transportation. To reduce waste in the form of unnecessary labor, we have taken full advantage of every ingenious machine which our remarkable talent for mechanical invention could devise. We have brought together industrial units into huge combinations, and have then administered them with such far-seeing wisdom that we have been able to produce certain great staple articles of manufacture so cheaply that our competition has been the despair of other nations. . . .

It is something of a shock to reflect that practically every victory we have gained in international competition has turned on considerations of cheapness and not on considerations of quality. Our talent for mechanical invention seems unequaled, and it has won us many victories, it is true; but aside from the advantage which that special ingenuity gives us, there are few articles we bring to the international market upon which we would dare rest our success solely on claims of high-grade workmanship. Wherever we have won success we have, as a rule, won it because we could manufacture, *en masse*, with wonderful economy. We have been successful because we could make a thing cheaper than our competitors, not because we could make it better. . . .

If real accuracy of workmanship is wanted, if artistic form and taste are desired, if thoroughly skilled and trustworthy handicraft is sought, it will not, as a rule, be found in a display of American wares. If we look for a produc-

tion that has had worked into it some of the soul and the character of the workman who made it, we will rarely find it bearing the legend, "Made in America." . . .

But, with all these advantages which have come to us, we are beginning to find that there are some countervailing losses. While we have made it possible for the unskilled man to tend some marvelous automatic machine and turn out the product with wonderful economy, we are now beginning to find that in keeping that man closely confined to tending the automatic machine, in giving him no intellectual interest in his work and no opportunity for any but the narrowest outlook upon the field of industry in which he is engaged, we have, unintentionally, taken almost certain means to prevent his mental and technical development. . . .

I have made a somewhat careful study of Germany's economic success, and in doing that I have become firmly convinced that the explanation of the remarkable progress there is to be traced, in the most direct manner, to the German system of education. The schoolmaster is the great cornerstone of Germany's remarkable commercial and industrial progress. The school system of Germany bears a relation to the economic situation that is not met with in any other country. . . .

There is a division of instruction in Germany known as continuation trade schools. These schools are designed for the instruction of youths engaged in regular industrial employment. They are auxiliary to the ordinary school system and entirely outside of the scheme for regular academic training or of higher technical instruction. They are for the rank and file of workers, for the privates of the industrial army. The courses are so arranged that they supplement the cultural training that the youths have had in the regular school system and, at the same time, supplement the technical routine of the shop or the office.

The students in these trade schools, you understand, are youths who have completed the regular compulsory educational course and have gone out into the ranks of active industrial and commercial workers. The hours of instruction are so arranged that they fall outside of the regular hours of labor in shop or office. The curriculum is broadly practical. It includes the science of each particular trade — its mathematics or chemistry for instance — and its technology. But it does not stop there. Principles of wise business management are taught. The aim is to prepare a student for the practical conduct of a business. He gains knowledge of production and consumption, of markets and of the causes of price fluctuation. He is put into a position to acquire an insight into concrete business relations, and into trade practices and conditions. Are not those aims worthy of our schools? What truer democracy can there be than to have a school system that will point the way to every worker, no matter how humble, by which he may reach a clearer comprehen-

sion of the industry in which he is engaged, and with the aid of this knowledge may rise to a position of importance in that industry? . . .

The forces of combination—the labor union and the trusts—are united and are working in harmony to accomplish at least one thing. They are united in a tendency to make, of a great percentage of our population, commercial or industrial automatons. They both tend to subdivide labor, and thereby limit the opportunity to acquire a comprehension of broad principles. They both tend to circumscribe the field of the apprentice, narrowing his opportunity, forcing him into petty specialization, and restricting his free and intelligent development. All this is placing us in grave danger of evolving an industrial race of automatic workers, without diversity of skill, without an understanding of principles, and without a breadth of capacity. There is but one power that can counteract that tendency—that power is the schoolmaster. These youths who can gain from their daily work only that narrow, routine, technical experience, which in the main is all that the conditions of modern industry offer, have a right to demand something more. They have a right to demand the opportunity for a practical education. As modern conditions narrow their technical training, those same conditions broaden the opportunity for the man who does acquire knowledge which will give him a grasp of more than a single detail of his business. . . .

Let me summarize my convictions on this subject. We have in a brief period built up a striking industrial success. The main elements of that success have been threefold. First, cheap raw material. Second, ingenious labor-saving inventions. Third, industrial combinations resulting in the great economies of production on a large scale. Our success in the international markets has in the main been built on cheapness, not on quality.

The very nature of our success has been such that it has minimized the value of superior handicraft. The character of large-scale production, the effect of the subdivision of labor, and the result of extensive use of labor-saving devices have united in tending to make automatons of our workers. That tendency is of necessity increased by some phases of the organization of labor.

The result is a changed order in industrial life. In many fields of industry, indeed in many phases of commercial life also, it is only the rarely exceptional man who is able to raise himself above the deadening influence of his surroundings—surroundings that give him a single specialized task to perform and which demand of him no intellectual interest, no understanding of the principles of the industry, no ambition for a broader technical skill.

The man without intellectual interest in his work, without understanding of the relation of his task to other things, and without ambition pushing him steadily toward technical improvement, is in a dangerous position.

Assuming that the picture drawn by Mr. Vanderlip of the blighting effects of modern industrial conditions on the workman is accurate, we may well pause to inquire whether we are doing all that the interests of the community and the individual demand to train workmen who understand the relation of their tasks to other things, who grasp the principles that underlie processes, and who push steadily forward toward technical improvement.

The Moseley Commissioners who visited us from England were in accord with Mr. Vanderlip in regarding the lack of trade schools for workmen as the chief defect of American public education.

I am disposed to think that Mr. Vanderlip undervalues the effect which the manual training exercises of the elementary school and the more specialized work of the manual training high school will eventually have on industrial conditions. Even if, however, manual training should produce all the results its advocates claim for it, there is still an urgent necessity for the trade school proper. But as to what is the best kind of trade school, what is the best course of study for such an institution, what is the best method of administering it, we are all profoundly ignorant. We have made an experiment in a small way, it is true. As far as it goes, it has been successful. But upon what lines it shall be developed, is still a question. The best models — the models we should imitate or improve upon — are to be found in England and Germany, particularly the latter. It is our duty to study these models, and to take from them those elements best suited to our needs.

(From the Annual Report for 1906)

In former reports I have dwelt upon the wisdom, indeed the necessity, of establishing trade schools as a part of the public school system. There are thousands of pupils who would be much better off learning a trade in school than in memorizing geographical facts or wrestling with the difficulties of Latin grammar. Educators from other lands tell us that the great defect of our public school system is the lack of trade and technical schools. When a leading economist makes the statement, which no one has attempted to contradict, that, of the enormous exports from the United States, not a single article is sold on account of its superior workmanship, it is surely time for those intrusted with educational administration, not in this city alone, but throughout this nation, to take heed whether the fault does not lie with the schools, which have done little for the trades.

True, New York City is rather before than behind other cities in providing trade schools. We have established two evening trade schools—one in Brooklyn and one in Long Island City, and a day technical school for girls (Washington Irving High School); but these institutions have been only moderately successful. In the manual training work of the elementary and high schools we have the touchstone by which to determine whether a boy or a girl possesses mechanical aptitudes; but here we stop short. We have not provided the means of training in specific trades the pupils who are endowed with these special aptitudes.

There are many difficulties in the way of establishing trade schools. The chief difficulty, however, is that we have no traditions to guide us, no standards by which to

measure our work, no fund of experience from which to draw in organizing schools of a type distinctly different from any we have yet established. Where are we to obtain such traditions, such standards, such experience? Evidently in those countries of Europe, particularly Germany, where the trade school has reached its highest perfection. I recommend, therefore, that your Board send one or two of your superintendents to Europe for a sufficient length of time to make a thorough study on the ground of the various European types of trade schools, and to report those features which seem best adapted to the training of the American boy and the advancement of American industry. Mr. Alfred Moseley, with unexampled energy and generosity, is showing us how the teachers of England may profit by a study of American schools and American teachers. His great work involves a high tribute to the efficiency of our educational institutions. We should not forget, however, that we have much to learn from the schools of Europe, particularly from her trade schools.

(From the Annual Report for 1907)

Since the publication of my Eighth Annual Report, nothing has been done in this city toward the establishment of trade schools except to improve and strengthen the two evening trade and technical schools established in the Manual Training High School of Brooklyn and the Bryant High School, Long Island City, and to establish an evening trade school for colored people in Brooklyn in Public School 5, similar to the trade school for colored people organized in Evening School 67, Manhattan. In the meantime, however, considerable progress has been

made in other parts of the country in trade or industrial education. In pursuance of the recommendations made by the Industrial School Commission appointed by Governor Douglas of Massachusetts, and under the fostering care of the legislature of that state, many trade schools have been established. Similar institutions are growing up in the West. Everywhere among thinking people the opinion is gaining ground that trade schools are necessary to provide training in the arts and crafts for the vast number of young people who are overcrowding the ranks of clerks and salesmen and the professions, to supply necessary skilled labor for manufacturing industries, and to enhance the value of American manufactured products. In a work of this kind the New York City public school system ought to hold the foremost rank, because our city is not only the greatest commercial center but the greatest manufacturing center in the United States. I repeat my recommendation, therefore, of a year ago, that as many members of your supervising force, as may be necessary, be sent to Europe and to different parts of this country to make a thorough study of trade schools, to the end that New York City may organize this work, which is inevitably coming, on a truly scientific basis.

Because of its enormous foreign population, as well as for the reasons given above, New York City stands sorely in need of trade schools. There are tens of thousands of children leaving our schools every year at fourteen years of age to go to work who have not completed even the elementary school course and who, under present conditions, have not acquired any art by which to earn a livelihood. They are turned loose on the community either to

make their living by their wits or to eke out a miserable livelihood by unskilled labor.

Whatever attempts to teach trades to children may be made in the future, the experience of other countries and of other parts of this country very clearly demonstrates that these attempts will be successful only when undertaken with the approval and coöperation both of employers of labor and of trades unions.

(From the Annual Report for 1908)

The establishment of trade schools by the public school authorities is now a matter of discussion in every manufacturing city in the land. Manufacturers and philanthropists alike are clamoring for the introduction of "industrial training" into the public schools. Manufacturers, because of the decay of the apprenticeship system and because skilled workmen are coming in constantly decreasing numbers from northwestern Europe, are confronted with a deficiency of skilled labor. In their zeal to have the public schools assume the burden which for three thousand years has been regarded as the duty of the manufacturer—the training of the artisan—some manufacturers even go to the length of asserting that, because the public schools do not turn out workmen skilled in the various trades, they have signally failed in their duty. Philanthropists, on the other hand, who see the difficulties the children of the poor must contend with in fitting themselves to rise out of the ranks of the unskilled and who deprecate the all too prevalent ambition to enter clerical pursuits or the professions, are equally strenuous in urging public school authorities to undertake industrial education.

The true reason for industrial education lies not in the partially selfish arguments of manufacturers nor in the semi-charitable views of philanthropists. It is to be found in the fundamental conception of modern education — to fit the child for his life environment. In our high schools we are fitting students to enter upon the special training required for the higher intellectual walks of life. But such students must necessarily be few. The great mass of pupils in the elementary schools — and more particularly the thousands of over-age children in the grades — are not receiving all the training needed to enable them to adapt themselves to the environment of modern life. They receive good instruction in the essential intellectual arts of reading, writing, arithmetic, and drawing, and they gain some knowledge of history, civics, and geography. But they do not receive sufficient training of the eye and the hand, either in school or in their city homes, to fit them to enter successfully on the highly specialized activities of modern manufacturing. Adequate training of the eye and hand in the use of tools and in the manipulation of simple machinery — training that will lay a foundation of manual skill for any work that may afterwards be undertaken — is the first step toward general industrial education.

Not the manufacturers and not the philanthropists, but the educators, who for twenty years, through good report and bad report, through ridicule and “detraction rude,” have fought for manual training in the schools, are the logical advocates, the true pioneers, of industrial education.

In the public discussions of this subject there has been much exhortation, much denunciation, much eloquence, but little of practical wisdom or suggestion. One may

search in vain the hundreds of books and pamphlets that have poured from the press on this subject, for a working plan that will meet the requirements of a great city within whose borders there are hundreds of trades, many of which the average citizen has never even heard of. In a small community in which there are two or three large manufacturing establishments the problem is comparatively easy. In such communities the obvious duty of the public schools, as far as industrial education is concerned, is to give instruction along those lines which will enable the youth to commence intelligently the work of learning one of the local trades. Far different is it in New York or any other large city in which the trades are infinitely diversified and in which some of the largest trades employ for the most part unskilled labor. The table on pages 120-121 presents some of New York's most important industries, together with the capital invested and the number of wage earners, according to the census of 1900.

The number of wage earners in the industries enumerated is, of course, vastly larger now than when the census was taken in 1900, but these are the latest figures at hand. At any rate, they show very clearly the impossibility under existing conditions of attempting, in connection with the public schools, to train workmen for all the trades established in New York. The task is too gigantic. The city could not afford it.

Under these conditions the only feasible thing to do is to extend the manual training in the schools so as to bring all pupils under its beneficent influence, and to make our manual training more practical in character so that it may afford a more fitting preparation for any manual trade to

CHIEF MANUFACTURING INDUSTRIES OF NEW YORK

INDUSTRY	NUMBER OF ESTABLISHMENTS	TOTAL CAPITAL IN DOLLARS, ROUND FIGURES	AVERAGE NUMBER OF WAGE EARNERS
All industries	39,776	\$921,000,000	462,763
Blacksmithing and wheelwrighting . .	1,003	2,000,000	2,304
Bookbinding and blank-book making .	239	4,000,000	6,270
Boots and shoes, factory product . .	99	4,000,000	5,430
Bread and other bakery products . .	1,966	13,000,000	10,915
Carpentering	1,491	8,000,000	8,660
Carriages and wagons	236	3,000,000	2,425
Cars and general shop construction and repairs by street railroad com- panies	6	6,000,000	2,131
Chemicals	37	4,000,000	877
Clothing, men's, factory product . .	1,889	36,000,000	30,406
Clothing, women's, factory product .	1,607	27,000,000	44,715
Confectionery	530	6,000,000	5,536
Cooperage	90	3,000,000	1,902
Cordage and twine	11	6,000,000	3,252
Electrical apparatus and supplies . .	104	8,000,000	4,768
Enameling and enameled goods . . .	21	2,000,000	1,458
Engraving, steel, including plate print- ing	85	3,000,000	1,640
Photolithographing and photoengrav- ing	47	500,000	667
Flouring and grist mill products . .	11	8,000,000	543
Foundry and machine shop products .	589	48,000,000	19,560
Gas, illuminating and heating . . .	13	134,000,000	4,065
Ironwork, architectural and orna- mental	175	5,000,000	4,305
Jewelry	229	5,000,000	2,833
Lapidary work	37	3,000,000	398
Liquors, malt	89	65,000,000	4,824
Lithographing and engraving . . .	94	10,000,000	5,474
Lumber, planing mill products, includ- ing sash, doors, and blinds . . .	126	5,000,000	3,620

CHIEF MANUFACTURING INDUSTRIES OF NEW YORK

(Continued)

INDUSTRY	NUMBER OF ESTABLISHMENTS	TOTAL CAPITAL IN DOLLARS, ROUND FIGURES	AVERAGE NUMBER OF WAGE EARNERS
Marble and stone work	164	\$5,000,000	3,771
Masonry, brick and stone	383	9,000,000	10,236
Mineral and soda waters	279	4,000,000	1,781
Musical instruments, pianos and materials	95	11,000,000	5,664
Paints	61	10,000,000	1,970
Paving and paving materials	40	8,000,000	1,489
Plumbing and gas and steam fitting	1,608	6,000,000	8,149
Printing and publishing, book and job	996	19,000,000	12,857
Printing and publishing, newspapers and periodicals	413	40,000,000	9,888
Saddlery and harness	364	1,000,000	758
Ship and boat building, wooden	83	4,000,000	2,484
Soap and candles	50	4,000,000	981
Sugar and molasses, refining	12	62,000,000	3,075
Tinsmithing, coppersmithing, and sheet-iron working	821	6,000,000	6,066
Varnish	32	5,000,000	521

which the child may turn his attention. The policy determined upon by your Board is clearly mapped out in the report of your Committee on Trade Schools.

* * * * *

There are two inferences to be drawn from the report adopted by your Board, which I cannot but think will commend the scheme to the thinking people of our community: —

1. The Board of Education does not propose to turn

out "half-baked" journeymen to compete with union labor. What it proposes to do is to fit boys and girls more completely than they are fitted at present to commence learning any trade requiring skill of hand.

2. The designs of your Board, when carried out, will do much to help the vast numbers of over-age children in the elementary schools. They now leave school with so meager an equipment, that their prospects of rising out of the ranks of unskilled labor are almost hopeless. With a very slight expenditure of money we might give all of such children at least the use of their hands. These are the children whom the opening of our workshops and kitchens in the afternoons and on Saturday mornings was designed to benefit.

Two things, in addition to the required appropriations, seem to me to be necessary to make your scheme a success:—

1. The employment of skilled workmen in our manual training and industrial processes. The boy gains respect for hand labor, only when he has a master workman to imitate.

2. Some means must be found to secure the active participation of manufacturers and trades unions in our industrial work. This participation may take two forms:—

(a) The organization of committees to advise the educational authorities as to the qualifications of teachers and the processes to be taught.

(b) A provision by which boys and girls, between fourteen and sixteen, may spend part of their working day in school. Our evening trade schools are helping some 2000 young work men and women to a more scientific

knowledge of the trades in which they are engaged, and to an acquaintance with many processes which, in the minute subdivision of labor, they cannot find the opportunity to learn in their employers' shops. But it is only the most energetic and capable who are willing to forego the evening hours of rest and recreation in order to gain these advantages. If the average boy or girl who goes to work at fourteen is to profit by what the schools can give him, time must be taken, not from his hours of recreation, but from his hours of labor, as is done in Germany, where industrial training has reached its highest development.

Manufacturers who up to fifty years ago felt themselves responsible the world over for the training of their workmen, must not be permitted, under any pretext, to shift that burden entirely to the public schools.

XII

PROMOTION AND RETARDATION OF PUPILS

In 1888, the year after he became Superintendent of Schools in Brooklyn, Dr. Maxwell began the campaign, which he has continued ever since, to accelerate the promotion and to prevent the retardation of pupils in their way through the grades of the elementary schools. In the Annual Report for 1888, he presented his first discussion of the evils of retardation, and laid the foundation for the system of promotion now in use throughout Greater New York.

—THE EDITORS.

(From the Brooklyn Report for 1888)

AGES OF PUPILS IN THE BROOKLYN SCHOOLS IN 1888

A STUDY of the statistics¹ of the subject does not, I am sorry to say, indicate that the average age of the children in the various grades is being reduced ; or, to put the matter in another light, that the average time required for a child to go through our schools is growing less. The number of children above fifteen in the schools has increased since 1887, while in no grade does the average age of the pupils show a decrease. In nearly all the grades a slight increase is shown.

Not only so, but, as may be seen by the following table, the average age of the pupils in each of the grammar grades has increased since 1883 :—

¹ In the report a table accompanied this study. — THE EDITORS.

GRAMMAR GRADES	1883	1886	1887	1888
First ¹	15.2 years	15.4 years	15.3 years	15.3 years
Second	14.6 years	14.7 years	14.7 years	14.8 years
Third	14.0 years	14.2 years	14.2 years	14.4 years
Fourth	13.9 years	13.8 years	13.9 years	13.3 years
Fifth	13.4 years	13.3 years	13.3 years	13.4 years
Sixth	12.9 years	12.9 years	12.9 years	13.1 years
Seventh	12.3 years	12.5 years	12.6 years	12.6 years
Eighth	11.7 years	11.9 years	12.1 years	12.2 years

When we consider that our course of study calls for nothing but the elementary parts of an English education; that nominally it requires but seven and a half years to complete the course; that a child beginning at six should graduate before reaching fourteen; that the actual average age of graduation is over fifteen; and that the length of time it takes to get through the grammar and primary schools has a constant tendency to cause two evils: to prevent parents from keeping their children at school throughout the full course, and to prevent those who do complete the course from pursuing their studies in higher institutions of learning; when we consider all these things, we cannot but regard this continued advance in the average age of our pupils with very serious apprehension.

In a paper read before the Department of Superintendence of the National Educational Association at Washington, President Eliot of Harvard College discussed this subject in a manner that is quite as applicable, I regret to say, to Brooklyn as it is to Boston. He says:—

In almost all the numerous collections of school statistics which are now published in this country, it appears that the various grades contain children

¹ See note, page 12.

much too old for them, who have, apparently, been held back. This phenomenon seems to be due partly to the ambition of teachers, and partly to the caution of parents. To illustrate with a specific case: In the Boston primary schools, which are intended for children of five to seven years of age inclusive, 44 per cent of all the children, for three years past, were over seven; and in the grammar schools of the same city, which are intended for children of from eight to thirteen years inclusive, from 20 to 24 per cent were over thirteen. It has already been mentioned that the average age of admission to the Latin School is not eleven years, as indicated in the program, but thirteen years; it is really thirteen years and three months. For three years past, from one third to one half of the graduating classes of the Boston grammar schools have been more than six years in the schools, the program calling for but six years. In the Boston primary and grammar schools, the tendency is in the wrong direction; that is, in 1887 there was a larger proportion of pupils over-age than in 1877. The ambition of teachers tends to keep children too long in the several grades, because they desire to have their pupils appear well at the periodical examinations, and also because they like to keep in their classes the bright children as aids to the dull ones. The caution of the parents tends to produce the same difficulty, because they fear overpressure; not comprehending that with children, as with adults, it is not work so much as worry that injures, or finding that the existing system adds worry to work. The exaggerated notion, already referred to, that it is necessary for a child to master one thing before he goes to another, is also responsible for the retardation of children on their way through the regular course. The result of this retardation is that the boy comes too late to the high school or to the Latin School, and so fails to complete that higher course if he is going into business, or comes too late to college if his education is to be more prolonged.

It may be said with equal truth, with regard to our system of schools, that the boy comes too late to the Central school to complete that higher course if he is going into business, or comes too late to college if his education is to be more prolonged. Not only so, but he comes too late to the First or Second grade to complete an ordinary public school education, and leaves school without that minimum of knowledge and training which may be considered necessary for his welfare and for the welfare of the state.

I have already explained some of the causes that go to account for the comparative slowness of promotion, such as irregularity of attendance, lack of mental power, and the like. But, even when due allowance is made for these conditions, no satisfactory explanation has been afforded of why the average ages of pupils in the various grammar grades should be higher now than they were in 1883.

Various hypotheses may be suggested to explain this advance in the average age, caused by what President Eliot calls "the retardation of children on their way through the regular course." One of these is that there may not be room, because of an insufficient number of classes, to promote all the children who ought to go forward in the higher grades; another, that there may be more in our course of study than can be fairly accomplished in the given time; a third, that, owing to the crowding in the lower primary grades, the teachers cannot accomplish the results required of them; a fourth, that the work of teaching is not as skillfully done as it might be; a fifth, that some or all principals are too strict in their requirements for promotion. I shall briefly consider each of these hypotheses.

The first — that there may not be sufficient space in rooms occupied by the higher grammar grades to permit all who ought to be promoted to move forward — cannot be the explanation, because the number of sittings to a class exceeds the average number of pupils to a class in each of the grammar grades.

The second hypothesis, that there may be more in our course of study than the average pupil can accomplish in the given time, cannot be regarded as the true explanation, because, if it were, it would produce the same effect in all

the schools. That this is not so, a glance at the following table, showing the average age for boys and girls of the graduates from each of the grammar schools for 1888, will at once determine.

(Here followed an elaborate table, the salient facts of which appear in the next paragraph.)

From this table it will be seen that the average age for graduation varies from thirteen years ten months in one school to sixteen years five months in another ; and that the average age for boys is from half a year to a year lower than for girls. Now, if boys can get through the course of study in a given time, it is unreasonable to suppose that girls cannot do the same ; if the children in one school can on an average complete the work at fourteen, it must be supposed that in another school they are not less brilliant or less industrious, always premising, of course, that they commence at the same age. The hypothesis, therefore, that the "retardation" is caused by the course of study falls to the ground.

It is right to add in this connection, however, that the disparity in the ages of graduation is in part caused by the difference in the age of commencing ; as, in some localities, children are sent to school at an earlier age than in others.

I am also of the opinion that in certain respects our course of study is too full, and that it might be relieved of some superfluous matters with decided gain to the schools.

The other three hypotheses — the crowding of the lower primary grades, the occasional want of skill on the part of teachers, and too great strictness in the making of promotions — contribute each in part to prevent the more rapid progress of the pupils. How these causes may be at least

partially removed will be considered hereafter. Their entire removal would result in reducing the average age of graduation by very nearly a year. The number of pupils that would have the advantage of completing the course in the grammar schools would probably be nearly doubled; while the course in the Central school might be extended to four years — the usual length of the course in other city high schools throughout the country.

HOW PROMOTIONS MAY BE ACCELERATED

I have pointed out that, as shown by the average age of graduation and by the average age of the pupils in the various grades, as well as by the percentage of the number promoted out of each grade on the average attendance in the same, promotions are not yet made as rapidly as the interests of the children and the school system require. It will not be denied that the child of average ability who enters our schools at six should complete the course at fourteen. Nor will it be maintained that it is too much to expect any teacher to have at least 75 per cent of the pupils of her class ready for promotion at the end of each term. Yet the average age of graduation is over fifteen, and the average of 75 per cent for each of the two terms into which the school year is divided has not yet been reached in any grade either in the Central or in the district schools. It is not claimed that all the pupils of a class can be made ready for promotion; nor that any pupil who is not reasonably well ready should be promoted. To argue so would be to assume that all are fitted by nature to keep step in the intellectual march — a preposterous assumption; but it is maintained that, owing to causes, some of which are

avoidable and some unavoidable, not all the children that should be advanced each term are allowed to go forward.

The three causes of the "retardation" of pupils — crowding in the lower primary grades, the occasional want of skill on the part of teachers, and defects in the methods of making promotions — can be remedied only by wise legislation on the part of your Board. I have pointed out how the first cause may be diminished, if not altogether removed. It remains to speak of the other two.

Considering the faithfulness and diligence with which our teachers labor, and considering the fact that improvement in their work is, as a rule, to be noted from year to year, it seems an invidious thing to criticize the results obtained. But the criticism is not one either of individual teachers or of the teachers as a body. It is rather a criticism of the conditions under which they are compelled to labor.

This criticism might be summed up in the expressions, lack of professional training, and lack of experience.

The greatest obstacle to progress in the public schools of Brooklyn is the lack of professional training. In 1887, 205 new teachers were appointed; of whom only 45, or 21.4 per cent, had received professional training. In 1888, 234 new teachers were appointed; of whom only 62, or 26.5 per cent, had received professional training. While this vast mass of raw material is year by year poured into our schools, while the intellectual and moral training of children is confided to persons who have had no adequate preparation for such work and who, in the nature of things, can have no realizing sense of their responsibility, it is idle to expect that progress will be rapid or that it will be even certain. The only test it has been found possible to apply

to candidates for teachers' licenses is the test of scholarship, and that has been made as high as it is possible to maintain consistently with supplying the vacancies in our schools. But possession of scholarship, while it is a necessary condition of teaching, does not necessarily imply the ability to teach. For two years after she enters upon her work the licentiate is engaged in learning its rudiments; and because she is utterly ignorant of the principles on which its rules are founded, she acquires, perhaps through ignorance, perhaps through imitation, faulty habits which mar all her future career as a teacher and which it is often most difficult afterwards to eradicate. And, in the meantime, what of the children under the untrained teacher? They suffer.

The remedy evidently is the adoption of a rule such as is now in force in one or two eastern and nearly all of the large western cities, that no one who has not had either a professional or a university training should be appointed to any position in the public schools. I hope to see the day when such a rule will be possible in Brooklyn. As yet it is not possible. But this, at least, is possible: the extension of the facilities of the Training School and the enactment of a rule that its graduates shall be given the preference in all new appointments.

I now come to the second of the criticisms on our teaching force — lack of experience. This criticism applies chiefly to teachers of the primary grades above the Seventh, and the grammar grades below the Fifth. In the excepted grades the teachers remain, as a rule, a sufficient length of time to acquire a thorough knowledge of the grade work, but it is not so in the other grades. The reason is that the

schedule of salaries leads to the custom, in my judgment altogether vicious, of the so-called promotion of teachers. To see how this system works, let us take a typical case. Say that a vacancy occurs in the Fifth Grammar grade. The teacher of the Sixth Grammar grade is promoted into the vacant place, the teacher of the Seventh grade into the Sixth, and so on down to the Sixth Primary.¹ Thus, because of one vacancy ten classes get ten new teachers, each of whom is inexperienced in the new grade work. Before another year rolls round the same process occurs again. It is probably within the mark to say that each class between the Seventh Primary and the Fifth Grammar has imposed upon it each succeeding year a new teacher wholly inexperienced in the grade work. Can substantial progress be reasonably expected while classes are continually kept under inexperienced teachers — teachers who had no professional training before they entered school, and who are not allowed to conquer the work of one grade before they are advanced to the next? Can it be hoped that the number of children promoted will bear a proper proportion to the number in attendance?

Nor is this the only bad result of the present system. At present teachers are, with rare exceptions, promoted in regular order, without regard to the results of their work. The consequence is that, as the able and the weak, the careful and the indifferent, are promoted alike, the stimulus of promotion for merit alone is absent. The

¹ At this time in Brooklyn there were eight grammar grades from the Eighth, which was the lowest, to the First, which was the highest; and seven primary grades, from the Seventh, which was the lowest, to the First, which was the highest. — THE EDITORS.

indifferent teacher — fortunately, the number of such is not many — naturally argues that, as she will probably be promoted in any case, there is no reason why she should call her latent energies into play. Our present system thus works injustice not only to the pupils who are continually kept under inexperienced teachers, but to those teachers who have striven earnestly to do their whole duty, while in most cases it rewards the stupid and the lazy equally with the able and the industrious.

The system which I have the honor to recommend would place all teachers of equal experience, in all grades below the Fifth Grammar, on equal pay. A teacher might begin her work in any of these grades and would receive an annual increment to her salary until the maximum was reached. Thus, as all teachers would receive the same pay, according to years of experience, it would be possible to place each in the grade in which she could render the most effective service; and, as there would be no advantage in moving from grade to grade, each teacher would remain in her grade long enough to become thoroughly familiar with all the details of her work and to make a study of the best methods by which it could be accomplished. The five highest grades, as their work necessarily involves greater difficulties, increasing from the Fifth upwards, should command larger salaries; and teachers for these grades might be selected from those below, either by competitive examination or according to results of class work. Such a system would secure abundant experience on the part of the teacher, and would promote only those who deserve promotion.

The third cause of the "retardation" of pupils is what

I must needs regard as the defective machinery according to which promotions are made. The only rule on the subject, except in the case of the First Grammar grade, is the following:—

Promotion of pupils shall be based solely on the record of scholarship for the term and at examination combined.

This rule, if properly carried out, probably presents a plan for making promotions that is open to as few objections as any which can be devised. But unfortunately no uniform method is prescribed according to which it is to be executed.

In only 45 of our 77 schools are the teachers required to keep regular records of the progress of pupils. And, where these records are kept, the system is such as to render it, in many cases, useless as a means of determining the promotion of pupils. It usually consists of marking the number of failures and successes in the recitation of lessons prepared at home, and the number of failures and successes in the solution of arithmetical problems propounded in class. These marks, again, are confused and complicated by the marks given for "deportment." Credit marks in studies are canceled by "failures" in deportment; so that, if the teacher happens to be depressed in spirits or to suffer from a fit of indigestion, or if she happens to be one of those who regard the movement of the head, the hands, or the feet, from a given position, as a breach of deportment, the brightest or the most diligent child may suffer by reason of the teacher's whim. There is reason to believe, however, that, even in the schools where class records are kept, but little attention is paid to them by the principals in making promotions. Virtually, promotions

are still determined in all grades, except the First grammar, by the principal's examinations at the close of the term.

There is no question that is now agitating the minds of educators so much as this of the influence of examinations on educational work. The objections to the plan of making promotions depend entirely upon stated written examinations, were never more forcibly set forth than by Superintendent White, of Cincinnati, in the following language:—

They (examinations) have perverted the best efforts of teachers, and narrowed and grooved their instruction; they have occasioned and made well-nigh imperative the use of mechanical and rote methods of teaching; they have occasioned cramming and the most vicious habits of study; they have caused much of the overpressure charged upon the schools, some of which is real; they have tempted both teachers and pupils to dishonesty; and last, but not least, they have permitted a mechanical method of school supervision.

It is not asserted that these results, especially in the degree here indicated, have universally attended the adoption of the "examination system." These tendencies have been more or less effectively resisted by superintendents and teachers, and they have been measurably offset, in some instances, by other measures, as the considering of the recitation record of pupils; but the testimony of educators, competent to speak, confirms the writer's experience and observation, and inside facts show that the above indictment of the system, when used for the purposes named, is substantially true. In the very nature of things, the coming examination with such consequences must largely determine the character of the prior teaching and study. Few teachers can resist such an influence, and, in spite of it, teach according to their better knowledge and judgment. They cannot feel free if they would. The coming ordeal fetters them more or less, whatever may be their resolutions, and many teachers submit to it without resistance; and this is sometimes true of teachers who have been specially trained in normal schools, and are conscious of the power to do much better work. They shut their eyes to the needs of the pupil and put their strength into what will "count" in the examination.

And, again, in writing on the same subject in his last report, he says:—

In the study and adoption of improved methods, the principal of the school must be the leader. If he be not intelligently and heartily enlisted in the reforms instituted, the progress of the teachers under his direction will be unsatisfactory. The continued use of tests that call for old results will keep most teachers in the ruts, and a principal may thus perpetuate in his school some of the hindrances of the examination system.

In Cincinnati the school authorities have gone to the opposite extreme. Pupils are promoted on their class records, and these records are simply the monthly estimates of the teachers of the progress of their pupils. Examinations for promotion have been abolished except in the case of those children whose parents or guardians think they have been unfairly dealt with by the teachers. Superintendent White, however, remarks that "The success of the estimate plan in Cincinnati is not conclusive evidence that it will be equally successful elsewhere. The organization and supervision of the Cincinnati schools are well adapted to the administration of the system."

Though I believe that much of what Superintendent White charges against the examination system in Cincinnati is also true in Brooklyn, I should hesitate to recommend the abolition of examinations for promotion for two reasons; one general in its character, the other peculiar to our system. In the first place, the objections to the examination system are valid, not against all examinations, but against examinations improperly conducted. When the examiner draws only from a limited stock of knowledge and consequently repeats his questions again and again, he puts a premium on cramming; when he asks for only unimportant details or insists that answers be given in the words of the book, he leads to the neglect of principles and encourages rote learning; but, when

examinations are properly conducted, they are indispensable to the progress of a system of graded schools. Not only may they be made the means of preventing cramming and rote learning, but of preventing a kind of teaching which I cannot help regarding as worse than either cramming or rote learning—that kind which is so loose and desultory as to demoralize the intellectual habits of the student. The habit of mind we should aim to cultivate is that which in the affairs of life enables a man to see clearly the end to be accomplished, and to take with honesty and firmness of purpose the path that leads most directly and easily to its accomplishment. In every branch of study the cultivation of this habit is a thing to be kept ever in view. Every time the teacher wanders, or allows her pupils to wander, from the straight path that must be pursued to master a subject, she encourages the formation of habits, to which we are all too prone, that are the reverse of those to be desired. Now, it is only teachers of the highest order, of whom in the nature of things there can be but few, that can, without external influence, curb this propensity to wander; and, as examinations properly conducted are the most powerful of these external influences, it follows that they should not, as yet, be abandoned.

But even if the theory of dispensing with examinations for promotions were the true one, there is still a reason why it should not be adopted at present in Brooklyn. This reason grows out of the statement already made in regard to the “inexperience” of the great majority of our teachers. So long as most of our new appointees are without professional training, so long as most of our

teachers remain but one or two terms in a grade, it would be absurd to make their estimates or marks, even if revised by the principals, the sole basis on which to make promotions.

Neither, on the other hand, should examinations be the sole basis. A child may suffer so from nervousness at an examination that it cannot do itself justice. A principal may ask questions which the teacher has not covered during the term. In neither case should a child be compelled to remain a second term in a class, re-learning the same facts, reading matter that it already knows by heart, and going through exercises that can result only in mental nausea.

The system implied in the rule of the Board already quoted is, in my judgment, the best; or at least the best for Brooklyn at present. The one thing wanting is a set of regulations to govern its execution.

In the attempt to find a basis or plan for such regulations, the first question that naturally arises, is: Of what shall a pupil's record for the term consist? Shall it be a record of recitations from day to day, modified by deportment marks, as at present? To this plan, besides the objections already stated, there is one which is to my mind conclusive. It may be briefly summed up in the dictum: marking and teaching at the same time are incompatible. If a teacher gives her whole mind to the work in hand, she has no thought to spare for marking. If she subtracts from the sum total of her mental energy the amount needed to form a judgment during the lesson on the work of each individual pupil, the value of her teaching is diminished in proportion. The usual plan is to give up a certain amount

of time to the work of marking. For instance, after a problem in arithmetic has been worked, the teacher takes whatever time may be necessary to examine and mark the answer of each individual pupil. This is almost an utter waste of time, yet it appears to be a necessary concomitant of the system that requires the marking of each recitation made by each pupil. The plan results both in dissipation of energy and in waste of time.

Such a system, moreover, altogether ignores the different ways in which knowledge is acquired. These, as President Hyde, of Bowdoin College, recently pointed out, are three: first, apprehension of the lesson as stated in the book, or taught by the teacher; second, application, or power to put the knowledge into practice; and third, comprehension, or grasp of the subject in its important features and broad relations. Comprehension is best tested by an examination at the end of the term; though, of course, the examination need not be confined altogether to this purpose. Application can most naturally be tested through the class exercises, in composition, in reading, in the solution of mathematical problems, and in drawing. Apprehension may be judged by the regular lessons on such subjects as history, geography, technical grammar, and the principles and rules of arithmetic. There are evidently three kinds of minds corresponding to these three ways of acquiring knowledge. In the race for promotion each kind is entitled to an equal chance. The plodder who learns every lesson and every detail correctly, but who is slow to grasp a subject as a whole and has little or no originality; the quick, analytic mind that acquires empirical knowledge intuitively and applies it readily to the solution

of particular problems, but is wanting in breadth and comprehensiveness; and the broad, logical mind that grasps a subject as a whole and easily converts knowledge into faculty; all these different minds should have their special aptitudes considered and should be allowed to advance, as far as may be, with equal steps.

To devise a system of marking that would put on record at stated intervals the teachers' estimate of the pupils' progress in the apprehension and in the application of knowledge would not be a matter of great difficulty. Should the marks, after being scrutinized and revised at least once a month by the principal and his assistants, and averaged for the five months of the term, reach a certain standard, the pupil should be advanced to the next higher grade, even if he made a comparative failure at the final examination. On the other hand, even if the record for the term were poor, yet if the pupil passed an examination designed to test his comprehension of the various subjects as wholes, he should also be advanced. Of course, if both the record for the term and the record for examination were high, there would be no doubt about the right to promotion. This plan, besides the advantages already noted, would have this also in its favor that it would make such subjects as drawing and observation lessons, which are now sometimes slighted by the teachers because they are not examined in at the end of the term, count for promotion.

It is desirable to accomplish two things by promotion: first, to advance children as rapidly as is consistent with the healthy operation of their intellectual powers; and second, to secure, as nearly as may be, uniformity of attainments among the pupils of a class. Neither object

will be fully accomplished so long as the record of class work is kept as it is, or is ignored, and so long as principals are permitted to adopt varying standards both as to the difficulty of their questions at the final examination and the percentage necessary to secure promotion. While one principal makes easy questions and allows pupils to pass on 70 per cent or even lower, and another gives difficult questions and makes 85 per cent the minimum, it is evident, especially in a system like ours, in which the primary and intermediate schools promote into the grammar, that many pupils will be promoted who should not be, that many will be held back who should be advanced, that classes will not be uniformly graded, and that, in a word, the worst abuses of the examination system are likely to flourish.

I have written at some length on this subject because of its supreme importance; and I commend it to your attention as one that calls for speedy and careful legislation.

METHODS OF PROMOTION

The discussions of retardation and promotion in the Report for 1888, led the Brooklyn Board of Education to revise its rules governing the promotion of pupils. The irregularities of the method that had theretofore prevailed and the main features of the new rules are discussed in the Report for 1889.

— THE EDITORS.

(From the Brooklyn Report for 1889)

The method of promoting in vogue up to the present year was practically this: the principal, in whom the power was vested, promoted from a given grade the number of scholars necessary to fill up the seats in the class room or rooms of the next higher grade. If twenty-

five pupils were ready for promotion, and if there was room in the next higher grade for only ten, ten were promoted. If there was room for forty, the twenty-five that were ready for promotion were promoted, and the full quota was made up by promoting fifteen that were not ready. This was not the plan in all cases, but there is only too good reason to believe that it was the plan in most cases where irregularities such as those noted above were found. Nor was even this the worst. If, in the middle of the term, a class became depleted in numbers, a forced promotion was made to fill the seats. During the year 1889, no less than 3548 children were sent forward by forced promotion. The evils arising from such forced promotions are very great. There is, first, the injury to the promoted child, in that he is put at higher work before he has mastered the lower work, and in that he loses part of the work in the class he leaves and part of the work in the class he enters. Thus his mind is stunted and its growth is distorted. There is, second, the injury to the children of the higher grade, whose progress is retarded while the teacher endeavors to make up the deficiencies of those newly promoted. There is, lastly, the injury done to the teachers who either lose their best scholars during the term or who are subjected to the worry of trying to bring up children who are not ready for the grade work. These forced promotions are, with rare exceptions, an unmitigated evil. It is only too evident that they are the cause of much of the undue pressure of which we often hear complaint, and that they are the fruitful source of weakness, inaccuracy, and slovenliness in the scholastic attainments of our pupils. A principal that makes, or

permits to be made, such forced promotions, except under very rare circumstances, is deserving of the severest censure. Yet in a few schools they are made two or three times a term.

Forced promotions are opposed not only to sound educational economy, but to the Rules of the Board. The rule is explicit : —

All promotions shall be made simultaneously throughout all the schools, on one day in January or February, and one day in June or July. The day in each case shall be designated by the Superintendent of Public Instruction, who shall notify each principal at least two weeks in advance of the date fixed.

It may be said, perhaps, in defense of the principals who have violated this rule, that it is of recent adoption and that they have not yet learned to deviate from the old unwritten law that tolerated all kinds of irregularities.

It is safe to say that, wherever the promotions from any grade or class for a year fall below 120 per cent of the average attendance for the year, or below 60 per cent of the register at the time of promotion, either the teaching has been intolerably bad, or pupils entitled to promotion have been held back. It is equally safe to say that, wherever the promotions from any grade or class exceed 200 per cent of the average attendance for the year, there have been forced promotions with all their attendant evils.

And yet circumstances may arise, in which it is not only desirable, but necessary to make small promotions during the term.

These circumstances, however, are very exceptional and are never sufficient to justify the wholesale promotions made by some principals. It would sufficiently provide for all such cases were the present rule amended to provide

that all promotions should be made on designated days, except as specifically authorized by the Superintendent.

PROMOTION AND THE MARKING SYSTEM

Much of the injury inflicted on our schools by recklessness in making promotions has arisen from the want of a uniform method of testing the fitness of children to be promoted. The Rules provide that promotions shall be made on "the record of scholarship for the term and at examination combined." But "the record of scholarship for the term" was left undefined and the subjects of examination were not determined. An inquiry instituted by your Superintendent developed the fact that in one third of the schools no "record of scholarship for the term" was kept, that in some it consisted of marks assigned for daily recitations, while in others it represented the results of monthly written examinations. In very few cases was "the record for the term" given any particular weight in making promotions, that being determined, when any basis was adopted, by a stated examination at the close of the term. This examination was made easy or difficult, according as there appeared to be room to promote few pupils or many pupils.

In an address delivered before the Teachers' Association, your Superintendent endeavored to set forth the evils of the old system from a slightly different point of view : —

The system of marking that has been in vogue is, in my judgment, not only opposed theoretically to every sound principle of education, but in practice it is a constant obstacle to growth. The system has been to mark each child on each day's lessons. Thus if, in a large class, each child was given two questions on any given subject and answered both, he received 100 per cent ; if he answered only one, he received 50 per cent ; if he an-

swered neither, he received a mark of failure. Now, it is perfectly patent that a child may have a pretty good apprehension of a subject, and still miss two questions put to him by his teacher. But this is not the worst. Suppose he received 100 per cent for answering two questions, he is liable to lose the whole or part of that mark by some breach of what is called deportment. And when we consider that there are still a few teachers in Brooklyn who regard it as a breach of decorum to move the head, the hands, or the feet from certain fixed positions, it is evident that the amount of injustice which may be done is simply incalculable.

But the liability to injustice is not the only objection to the present system. A still more serious fault is, that it tends to foster that worst of all methods of teaching, according to which the teacher stands, book in hand, before her class, and hears recited the lessons that were learned at home over night. Such a system of marking is the fit concomitant of such a method of teaching. While teaching consists of loading the memory with unassimilated facts, it may be all very well to use a system of marking that is capable only of measuring the quantity of facts deposited in the memory. But if teaching is to be a part of education ; if its aim is to be the training of all powers of the mind ; if children are to cultivate apprehension, comprehension, and application ; then surely, we ought to have a system of marking that will tell the story of improvement in apprehension, in comprehension, and in application.

Happily, we are gradually growing out of the old system of rote learning ; and those teachers who have made the greatest advance in this direction are those who feel most keenly the incubus of the present marking system. The necessity of putting down marks during every lesson not only involves a serious loss of time, but it prevents, nay it paralyzes, that glad and spontaneous effort on the part of both teachers and pupils which is the necessary condition of growth and improvement.

It may be added that, under the old system, our children were subjected to an amount of written examination which, there is good reason to believe, exercised, especially in the case of very young children, a most baleful influence on their physical health, and very seriously interfered with the work of teaching. In some schools, particularly branch primary schools, where successive examinations were conducted at the end of each term by the principal, the branch principal, and the head of department, I have

found that as many as three out of the ten months of the school year were almost wholly given over to examinations.

To remedy these evils the Committee on Studies proposed and the Board adopted a plan for marking the progress of children and determining their right to promotion, which went into effect on the first of last September. The essential features of this plan are as follows:—

1. The teachers' marks are estimates of their pupils' progress, subject to revision by the principals, and are not the results of the daily marking of recitations or of stated examinations.

2. All pupils that receive certain marks from their teachers must be promoted.

3. Those pupils who do not reach a certain standard may be promoted if they pass an examination given by the principal.

4. The principal may require all the pupils of a class to take the term examination, or he may exempt those whom it is considered expedient to exempt.

5. Term examinations are confined to the last two weeks of the term.

But one promotion has, as yet, taken place under these rules. The results have been, upon the whole, satisfactory. The waste of time and energy in useless examination has been diminished; promotions have been made with greater regularity; the Superintendent has been enabled to determine with some degree of accuracy just where the grades of classes ought to be raised or lowered, in order to adapt the organizations of the schools to the needs of their patrons; and, lastly, in making their estimates,

teachers have been compelled to think of the progress of individual pupils in a way that is having a most beneficial effect upon the instruction.

The good results of this experiment—for it must still be regarded as an experiment—have been attained in spite of a most determined opposition—an opposition all the more formidable because in most cases partially concealed. Many teachers are opposed to it simply because it is new and requires a mode of teaching and of thinking about their pupils quite different from that to which they have been accustomed. Others again are opposed to it because, as they are not ashamed to confess, they find it difficult to form rational estimates of their pupils' progress. Many principals are opposed to it because it takes the absolute power of promoting out of their hands, and divides responsibility with the class teachers. Still others are opposed to it because it deprives them of many opportunities for conducting written examinations.

These forces were all strongly operative at first; but, with increased experience, their vitality is decreasing. Teachers are beginning to realize that the new system, when properly administered, involves very much less labor than the old one, and that the responsibility placed upon them has added to the dignity and power of their positions. Principals, who had not yet learned the lesson, are beginning to find out that the chief business of a principal is not to sit in his office writing examination questions, but to teach and to supervise teaching, and that the chief business of teachers is to teach and not to correct examination papers.

Experience has developed several serious defects in the

present rules. These will doubtless be remedied by your Board in due season. When this is done we may not unreasonably look forward to the cessation at no distant date of the evils of excessive examination, of too rapid promotion, of too slow promotion, and of forced promotions.

NORMAL AGE IN THE GRADES

In 1904, Dr. Maxwell returned, in his Greater New York Report, to the plan he had followed in Brooklyn from 1887 to 1898, of reporting the ages of pupils. He made the important addition, however, of fixing the limits of normal age for each grade, so as to determine the proportion of over-age pupils in the grades. These limits have now been adopted with practical uniformity throughout the United States. This discussion is also noteworthy because its immediate result was, within two years, the organization of some hundreds of special classes for over-age children. — THE EDITORS.

(From the Greater New York Report for 1903-1904)

For a proper understanding of the facts, it is necessary to bear in mind that the normal ages of children in the several grades, if they enter at six years or six years and a half, and are not retarded during their course, are as follows:—

First-year grades	6 to 8 years
Second-year grades	7 to 9 years
Third-year grades	8 to 10 years
Fourth-year grades	9 to 11 years
Fifth-year grades	10 to 12 years
Sixth-year grades	11 to 13 years
Seventh-year grades	12 to 14 years
Eighth-year grades	13 to 15 years

The next table shows the number in each year grade above the normal age, and the percentage of this number on the whole number of children in the grade:—

GRADES	NUMBER OF PUPILS	NUMBER ABOVE NORMAL AGE	PER CENT OF WHOLE NUMBER
First year	87,676	20,392	23.2
Second year	84,254	32,141	38.1
Third year	82,959	37,414	45.0
Fourth year	73,617	36,275	49.2
Fifth year	61,666	30,226	49.0
Sixth year	45,341	19,069	42.0
Seventh year	31,941	10,493	32.8
Eighth year	24,220	6,133	25.3
	491,674	192,143	39.0

Why, it will be asked, is there such an enormous number of children above the normal age in each grade? Many causes doubtless contribute to this most unfortunate result, among which may be mentioned the following:—

1. In well-to-do families there is a constant and, I am convinced, a mistaken tendency to keep children from school until they are seven or eight years of age.

2. The large size of our classes, particularly in the lower grades, prevents that attention on the part of teachers to individual pupils, which is necessary to normal progress as well as to individual development, and hence pupils are not promoted as rapidly as their best interests demand.

3. The teaching in the part-time classes is necessarily less effective than in full-time classes, and this fact operates to retard the promotion of pupils.

4. The great influx of non-English-speaking foreigners every week into our schools introduces into the lower grades thousands of children who as a rule are beyond the normal age of American children in these grades.

The first three causes will be permanently removed only by a permanent increase in our school accommodations. The fourth cause, which is doubtless the chief cause, may be partially removed by better management in the schools. If the foreigners above the normal age could be segregated in classes in which their attention would be confined almost exclusively to the learning of English until they are able to enter a grade suitable to their years and attainments, a great gain would have been made; the lower grades would be relieved, while the foreigners would make more rapid progress. A good beginning in this work has been made by the Board of Superintendents, which has authorized the organization of several such classes. I feel, however, that we need a more hearty coöperation on the part of the principals in this work. They have been, and are still, too much addicted to the practice of placing a foreign child who cannot speak English, no matter what his age or what his attainments in the schools of his native country, in one of the lower grades, and allowing him to remain there until he has picked up English without special instruction. The results of this policy are most disastrous; the lower grades are congested, and the foreigners who are above the normal age are, in too many cases, unable, when they reach the age of fourteen, to qualify in school attainments for the certificate necessary to enable them to go to work.

The most important problem of the day in school administration is, how to get the older pupils who are cumbering the lower grades into the higher grades. Their presence in the lower grades is detrimental to the younger children, because they take much of the teachers' time and attention

that belong to the children of normal age. Their presence in the lower grades is detrimental to themselves, because, by their position in the school, they do not enjoy the associations or receive the instruction their years demand, and because, in the majority of cases, they are precluded, at the age of fourteen, from qualifying for the Health Department certificates which the law exacts as a preliminary to employment. To the solution of this problem, the Board of Superintendents, the district superintendents, and the principals must devote their best efforts.

SPECIAL CLASSES FOR OVER-AGE PUPILS

(From the Greater New York Report for 1905-1906)

In my Sixth and Seventh Annual Reports, I was obliged to call attention to the very large number of children beyond the normal age in each of the grades of the elementary school. The number is still very large, but it is gradually diminishing. For instance, the total number of children in the first, second, third, fourth, fifth, and eighth year grades is considerably less than it was a year ago; while there is an increase in the number in the sixth and seventh year grades. These facts show that a very determined effort is being made by all concerned — district superintendents, principals, and teachers — to advance the over-age pupils as rapidly as possible. These efforts were to some extent systematized during the year by the establishment of three new grades, in which over-age pupils receive special instruction — Grade C for foreign-born children who do not speak the English language; Grade D for children who are approaching the age of fourteen, who have

no hope of completing the elementary course, but who desire to obtain work certificates (issued in accordance with the child-labor law); and Grade E for children who hope to graduate, but who need special coaching, to enable them to enter the seventh grade at the earliest possible moment.

The instructions to principals are, that pupils are not to be detained for a longer period in these special classes, than is necessary to enable them to enter the regular grades with advantage to themselves. For instance, foreign children are kept in Grade C only until they obtain some facility in reading, writing, and speaking the English language.

CAUSES OF AND REMEDIES FOR RETARDATION

(From the Greater New York Report for 1909-1910)

The number of over-age children in the grades is slowly but steadily decreasing. The total number of over-age children has decreased from 156,208 in 1909 to 146,326 in 1910, or from 28.4 per cent in 1909 to 26.1 per cent in 1910. It is further shown by the fact that the largest per cent of over-age children is no longer found in the fifth-year grades, but in sixth-year grades, indicating that the means adopted to secure the more rapid promotion of the over-age children are measurably effective. These means are the establishment of continuation classes in the summer vacation schools for children not promoted in June, and the organization of special classes into which over-age children are drafted for a term or two and given special coaching to enable them to catch up with the classes to which, by reason of physical development, they more nearly belong.

There has been, ever since I originated the inquiry into the problem of retardation by publishing tables of the ages of pupils in the New York schools, much speculation as to its causes. As far as the schools of New York City are concerned, I have finally settled the question as to the chief cause by ascertaining and publishing last year and this year the ages of the pupils admitted for the first time, to the first-year grades. The chief cause is late entrance to school. The following table shows the total number of new pupils admitted to the first-year grades, the number below seven years of age and the number over seven years of age. Six years is the age at which a child may legally be admitted to the grades. Seven years is the age at which the law requires him to go to school.

TABLE

	UNDER 6	6 TO 7	7 TO 8	8 TO 9	9 TO 10	10 TO 11	11 TO 12	12 TO 13	13 TO 14	OVER 14	TOTAL
Manhattan . . .	831	27,317	6,677	1,635	486	137	52	30	16	11	37,192
The Bronx . . .	295	6,602	1,453	422	150	51	20	13	9	4	9,019
Brooklyn . . .	1,842	24,445	5,546	1,553	544	262	129	76	56	40	34,493
Queens . . .	747	4,622	1,031	279	75	29	11	6	3	2	6,805
Richmond . . .	203	1,193	294	75	27	7	6	6	3	5	1,819
Total . . .	3,918	64,179	15,001	3,964	1,282	486	218	131	87	62	89,328

Of the 89,328 admitted to school for the first time in the first-year grades, 21,231, or nearly 24 per cent, were over the compulsory school age, and were from one to seven years beyond the age at which children may be admitted to the grades. This fact alone accounts for a

very large part, indeed the greater part, of the retardation shown in the preceding tables. If children do not enter school on time, they cannot complete the course on time. For retardation caused by late entrance, the school cannot bear or assume the responsibility.

Other causes of retardation there are, however, for which the school must accept its share of blame. To determine what these causes are and, if possible, to find remedies, I appointed eight committees of principals early in the school year to study the whole question.

The eight committees were in substantial accord in stating that the following are the chief causes of failure on the part of pupils to secure regular promotion from grade to grade. The causes, however, are not stated in any order of intensity.

IRREGULAR ATTENDANCE, due to poor home conditions; looseness of parental control; ignorance of parents; lack of opportunities for home study; poverty of home requiring pupils' assistance; sickness of other members of the family; lack of proper clothing; feeble health of individual pupils; poverty of surroundings.

TRUANCY, which is attributed by the principals to three chief causes: lack of support by the courts in enforcing the Compulsory Education Law; lack of coöperation of parents; and lack of a sufficient number of attendance officers.

IGNORANCE OF THE ENGLISH LANGUAGE, due to foreign birth and to the fact that English is not the language of the home.

LATE ENTRANCE INTO SCHOOL, due to two causes: the presence of immigrant children, and the fact that many

children are sent to private schools before they enter the public schools.

TRANSFER FROM SCHOOL TO SCHOOL. — Such transfers involve loss of time owing to variations in the interpretation of the course of study and syllabuses, and in following different sequences of topics in different schools, and frequently to delay in entering school after removal from one school district to another school district.

PHYSICAL DEFECTS. — These are caused or intensified by lack of medical care: nervous troubles; adenoid growths and enlarged tonsils; defective eyes, ears, and teeth; malnutrition; physical precocity; lack of play and exercise; unsanitary conditions.

SLUGGISH MENTALITY. — Sometimes this feature takes the form of positive mental defect, and sometimes it characterizes pupils as slow in receptivity and response. Sometimes it takes the form of moral defects, such as dishonesty, lying, and cheating, which are intensified by improper reading, the following of bad examples, and petty defiance of law in the streets.

EXCESSIVE SIZE OF CLASSES, which prevents teachers giving necessary individual instruction.

PROLONGED OR FREQUENT ABSENCES OF TEACHERS, during which their classes are taught by substitutes who are sometimes indifferent and sometimes inefficient.

PART TIME, which prevents pupils from doing the work of the lower grades thoroughly.

VARYING STANDARDS OF RATING PUPILS. — Some principals and teachers adopt too high a standard; some too low a standard.

INEFFICIENT TEACHING, due to teachers' talking and doing too much for their pupils; lack of thoroughness; obsolete aims and methods in teaching on the part of some of the older teachers; occasional lack of the power of discipline; neglect of opportunity afforded by the study period to teach children how to study.

IMPROPER METHODS OF PROMOTION, due to holding back pupils unnecessarily; not making promotions with sufficient frequency; and to differing standards of promotion.

The analysis made by these principals of the causes of retardation in their various schools showed that the two chief factors are personal illness on the part of pupils and late entrance into school.

The remedies suggested by the various committees were many and heterogeneous. There seemed to be little agreement as to what, if any, changes in our system should be made in order to eliminate as far as possible the admitted evils of retardation. In order to obtain a more definite result, I classified the various suggestions and submitted them in the form of direct questions to a committee consisting of the chairmen of the original committees. The report of this committee seems so valuable and important that I print it *in extenso*: —

REPORT OF COMMITTEE ON REMEDIES FOR RETARDATION

NEW YORK, June 24, 1910.

DR. WILLIAM H. MAXWELL,
City Superintendent of Schools.

DEAR SIR:

The special committee appointed by you to draft a final report on certain matters relating to the problem of retardation as outlined in your letter of April 18, 1910, has the honor to submit the following report: —

I. The advisability of dividing the matter in each subject of study in each

grade of the public schools into topics to be taken up in the same order in all schools.

The committee is of the opinion that it is not advisable to divide the subject matter in each subject of study into topics for uniform adoption by all schools. To lessen the amount of retardation that may result from the transfer of pupils from one school to another, which may be due to variation in the teaching plans of the respective schools, it is suggested that principals provide for the individual instruction of such pupils when needed, the instruction to be given by regular class teachers, by teachers in training, or by the pupils' classmates.

II. The formulation of a plan for a uniform method of rating pupils in studies and a uniform standard for promotion. In connection with this topic, the question, "What part should examinations play?" should be considered.

With regard to that part of the topic dealing with the formulation of a plan for a uniform method of rating pupils in studies, the committee recommends—

(1) That a suggestive scheme embodying a uniform method for the rating of pupils be devised;

(2) That such a scheme be offered principals for optional adoption;

(3) That the plan be based on a point system;

(4) That in the point system adopted each subject of study receive an evaluation based on its relative importance in each grade as indicated by the course of study.

With reference to that part of the topic which relates to a uniform standard for promotion, the committee recommends—

(1) That, for the purpose of indicating the standards for promotion that should prevail, official suggestions be issued covering the subjects of study of the grades;

(2) That these suggestions be similar in character and scope to the suggestions contained in the form now used in the 8B grade, entitled "Estimate of Graduating Pupils' Attainments";

(3) That suggestions thus issued be used solely for the purpose of standardizing the work of the grades, and not for the purpose of rendering reports of any kind.

In reply to the question, "What part should examinations play?" the committee recommends—

(1) That examinations be not imposed upon schools by superintendents as testing instruments for promotion or for public comparison;

(2) That examinations be not imposed by principals as the chief method of determining promotion.

III. How often should final or general promotions be made?

The committee recommends that final or general promotions be made at

the end of each term of twenty weeks, and not oftener. In this connection the committee suggests that there be submitted for the consideration of principals the question of the feasibility of their organizing some of their regular classes at the beginning of the eleventh and thirty-first weeks of the scholastic year. These classes are not to be special classes. The only difference between them and the present regular classes is that the terms would overlap. This plan would afford an opportunity of transferring pupils who are not promoted at the close of a term to another class ten weeks behind the former one. In this way a pupil would lose only ten weeks instead of twenty. This plan would also give an opportunity for rapid promotions without the necessity of a pupil's skipping an entire grade. With regard to the plan outlined, the committee recommends—

- (1) That the plan be submitted to principals for optional adoption ;
- (2) That to render the plan feasible in small mixed schools, proper authority be delegated to the principals to organize mixed classes wherever such classes may be necessitated by the plan of organization.

IV. What rules should be adopted to determine the number of terms a pupil may be held in any one grade ?

The committee recommends that in general pupils be held in a grade no more than two terms, with the proviso that this rule be not construed to apply to promotion from the 8B grade under the present course of study.

V. The advisability of a modified course of study for classes of retarded or backward pupils. If any subject should be omitted from the present course in such classes, the committee should specify the subject. If parts of subjects are to be omitted, the committee should specify which parts.

In connection with this topic the committee agreed —

(1) That a modified course of study is advisable for classes of backward or retarded pupils;

(2) That the City Superintendent be informed that the committee is unable to take action on that part of the topic relating to the subjects and parts of subjects to be omitted, owing to the committee's lack of information relative to (a) the administration of successful special classes now in operation, and (b) the modifications in the course of study which have been made to meet the needs of such classes;

(3) To offer to undertake the preparation of such modified course of study when supplied with the aforesaid information;

(4) That the modifications in the regular course of study necessary to meet the needs of retarded or backward pupils should vary with local conditions. This would necessitate the preparation of a course sufficiently elastic in character to meet the requirements of special classes in the various sections of the city.

VI. The advisability of organizing special classes for the rapid advancement of particularly bright pupils.

The committee recommends that where conditions permit, such classes be organized.

VII. The desirability of making a distinction between the graduates of the elementary school who may be admitted to high school and the pupils who have passed through all grades without gaining enough proficiency to be entitled to a diploma.

The committee is of the opinion —

(1) That it is desirable to make a distinction between the graduates of the elementary school who intend to go to high school and those who do not so intend;

(2) That the distinction between the two classes of pupils should be formally recognized by a differentiation in the course of study during the latter half of the elementary school course;

(3) That this differentiation in studies should consist of —

(a) A course of study for those who intend to go to high school or who show the requisite ability for high school work;

(b) A course of study for those who do not intend to go to high school or who do not show the requisite ability for high school work:

Each division superintendent, assisted by his district superintendents and principals, should be permitted to recommend the second course of study to the end that it may be adapted to the peculiar needs of the section of the city to which it applies;

(4) That the two courses of study should be so interrelated that transfers could be made from one to the other without loss to the pupil.

VIII. The advisability of employing assistant teachers to coach backward pupils.

The committee is of the opinion that it is not advisable to employ assistant teachers to coach backward pupils, by the term "assistant teacher" meaning a regularly licensed teacher delegated to take charge of such pupils. The committee believes that the special classes now permitted can care for these pupils, and that where special classes cannot be organized for lack of room, classes for backward pupils could not be organized for the same reason. But the committee recommends that the principals be permitted at their discretion to employ a teacher receiving substitute's pay to perform such duties as the principal may direct in coaching backward pupils or in taking the class of a teacher who may herself coach backward pupils of her own grade.

IX. Should algebra and inventional geometry be eliminated from the course of study in the elementary schools?

The committee recommends that algebra and geometry be thus eliminated. In support of this recommendation the committee submits the following considerations: —

(1) The main practical application of the algebra of our present course

lies in the solution of the so-called "indirect" cases of arithmetic. But these cases are introduced early in the grades, and necessitate no elaborate algebraic development for their proper understanding ;

(2) The inventional geometry of the seventh year is remotely related to a few mensuration topics of the 8A grade, and more directly concerned with certain constructive principles applicable to shop work. The committee is of the opinion that the mensuration topics of the 8A grade are of easy inductive illustration when the need therefor arises, without the elaborate introduction furnished by the present seventh-year exercises in geometry; and that the constructive principles needed in the shop are the more readily developed and the more understandingly applied if they be taught in the shop when the need arises for their use.

(3) In view of these considerations, it is believed that both algebra and geometry would be more profitably studied if deferred until they can be intensively studied in the high school.

The committee further recommends that no new subject be introduced to take the place of algebra and geometry in the event of their elimination ; and that the 200 minutes per week allotted to mathematics be devoted wholly to the present work in arithmetic of the grades concerned.

X. Should science be eliminated from the seventh and eighth years of the elementary schools?

The committee recommends that science be retained and suggests that the present course in science be revised in order to correlate it more closely with the needs and experience of the pupils.

XI. On the assumption that no matter what arrangements are made with regard to promotion; no matter what provision is made for the course of study, there will always be some pupils, possibly many pupils, who will not work up to the full measure of their ability, the question arises, "How may enthusiasm be stimulated and the will to work developed in these indifferent pupils?"

The committee believes that the schools are now doing much to stimulate enthusiasm where enthusiasm would otherwise lag, through the agency of the various organized and unorganized activities that are now in operation throughout the school system. The value of such activities varies as the principals, teachers, and pupils who are interested therein. In view of these facts the committee respectfully states that it has no specific suggestions to offer.

XII. Should foreign languages be eliminated from the course of study of the eighth year of the elementary schools ?

The committee recommends —

(1) That foreign languages be eliminated from the present course of study of the eighth year of elementary schools;

(2) That in case foreign languages are eliminated, 120 minutes of the time now allotted thereto be assigned to geography, as now obtains in schools having no foreign language, and 80 minutes be given to unassigned time.

Respectfully submitted,

E. J. JONES, *Chairman*,

GEO. B. GERMANN, *Secretary*.

The thanks of the educational authorities and of the community are due to the ladies and gentlemen who composed these committees and who gave their time and energy willingly to make the necessary studies. They have done, in my judgment, a most valuable piece of work that will bear good fruit in the not distant future.

HELPING BACKWARD PUPILS

(From the Greater New York Report for 1910-1911)

I have been careful to advise the principals that the pressure to secure more generous promotions must not be construed to mean that pupils who are unfitted to do the work of the next higher grade are to be promoted. It means only that every effort is to be made to render every pupil fit for promotion. Schools have been run too exclusively for the sake of the bright pupils. The dull pupils or the apparently dull have been allowed to shift for themselves. The only chance they had was to repeat the work of the grade in which they failed, and thus they lost valuable time. This policy must now be changed. The bright pupils must not receive less attention. The dull pupils, however, must receive much more attention. They must not be allowed to fail, if human kindness and teaching skill can prevent it.

In my annual address¹ to the principals delivered at the

¹ Subsequently printed in pamphlet form. — THE EDITORS.

opening of the schools in September, after dwelling on the school conditions that make for "the prevention of retardation," I spoke as follows on the devices and organization plans which I have found most effective in helping backward children and in preventing retardation:—

"There are certain devices which have been used to help the slow or backward children. These generally take the form of help to individuals or to a group of backward children. Class teachers meet backward children before nine or after three. I am not very fond of that device of meeting children after three, because the teacher is always tired and to the pupil the lesson necessarily savors somewhat of punishment. Then, as I have indicated, the brighter children are set to helping their duller companions. The objection, if there is an objection, is that some children will pretend to be dull, while they are simply lazy and bent upon getting some one else to do their work for them. Sometimes the pupil teacher from training school is asked to spend her time coaching one group after another of dull pupils in any corner of the house that may be available. Again, part-time teachers are used to instruct dull pupils during their shorter sessions. All of these devices are excellent as far as they go, but only upon one condition — that they are planned systematically and that the plans are rigorously executed. It does little good for a teacher to bring a boy for instruction one morning at eight o'clock and then do nothing more for him for a week or a fortnight. In fact, any school work that is to be effective, just as in the case of acquiring a new habit or breaking off an old habit, must be done every day. No sporadic efforts will suffice. You cannot rouse the dormant faculties of a dull boy or a timid

girl by a half hour's exertion, no matter how strenuous. You must keep up your lessons regularly — every day — until the habit of using the brain has been acquired. Then and then only will the normal amount of instruction prove sufficient.

“Hence, if you rely upon early morning instruction or study in school to bring up your slow or backward children, you should adopt some such plan as Superintendent Ettinger worked out when he was principal of Public School 147, Manhattan :—

1. The teachers of Grades Five to Eight report the names of pupils who are backward in language and number.

2. Such pupils are furnished with cards and are notified that, if they desire to study in the morning before 9 o'clock, they may report at rooms designated on cards at 8.15.

3. Each child's card is punched as he enters the study room by a teacher who volunteers to take charge.

4. At 8.40 the regular teachers visit the rooms to inspect the work accomplished and to give assistance and explanations.

“Dr. Ettinger, who worked out this plan, says that not only did it prevent many children from failing, but that it developed self-respect and self-confidence in the pupils, because they were praised by their teachers for their industry.

“A word of caution, however, is needed here. The nervous, highly-strung child, or the child who is physically weak, may suffer more than he gains by coming to school more than the regular hours. Here common sense guided by experience must determine the right thing to do.

“If you wish to use a pupil teacher to coach backward pupils, some such plan as that used by Miss Elmore, in Public School 117, Brooklyn, will prove useful. A pupil

teacher is each day assigned to six or seven different classes, on a regular schedule arranged in half-hour periods. Such an assignment is continued to the same classes for at least two weeks, and longer if necessary. The pupil teacher is not given, as is too often the case, the difficult task of working with the backward pupils, but conducts, with the bright pupils of each class, a lesson which the regular teacher has carefully outlined, while the regular teacher takes out of the class the few backward pupils for special drill in the subjects in which they are deficient. Thus it happens that each teacher has half an hour free each day for the purpose of helping the backward children.

"In the same way, if brighter children are to help the duller ones, the work must be done systematically and, above all, through team work. There should be a committee of your brightest arithmeticians, of your best readers, of your most expert artists, of your most accomplished writers, and the members of each committee should work together to help the weaker children.

"There is one prevalent cause of difficulty in promoting that is scarcely referred to in the reports I have read this summer, and that is losses caused by the absence of regular teachers and the presence of substitutes. Indeed, this cause was mentioned, as far as I have seen, by but one principal, Mr. Page. He has worked out an ingenious plan to prevent these losses, and declares that it has been entirely successful. The assistant to principal, he says, taught the major subjects personally in classes not under the charge of a regular teacher. I see no reason why this plan may not be indefinitely extended, so as to minimize the great losses that now arise through the prolonged ab-

sence of regular teachers. When a teacher is absent for any length of time, the lessons in the major subjects, such as arithmetic, reading, grammar, and language, should be given by experienced teachers, while the substitute takes the classes of those teachers in less important branches.

"I was somewhat surprised in reading the accounts of what is done to advance backward pupils to find that so little stress is laid upon the use of the study hour. It is during that hour that the brighter children may best help the duller ones. In Miss Blake's school twice a week the older girls meet the younger girls in what is known as the 'family study period.' 'This, we have found,' says Miss Blake, 'more helpful than anything else.'

"There are a few rules which I think should be followed in the management of the school study period, if that time is not to be largely wasted : —

1. The teacher should spend the entire time in helping and directing individuals. She should divert none of it to reading, or correcting exercises, or to clerical work.

2. There should be no aimless study. Each child should have an assigned task. For every child there should be a clearly defined object to be attained during the study period, and that object should, as a rule, be sought in the subject in which he is most deficient.

"In arithmetic, for example, he should work out a typical example, and write a succinct account of the process.

"In history or geography, he should make an analysis of a paragraph or a chapter; that is, throw its contents, briefly stated, into the form of a synoptic table.

"In grammar, he should write from memory rules or definitions, and then compare his version with the textbook, or do an exercise in parsing and analysis.

3. Invariably have the children use pen or pencil during the study period, in carrying out a study task or in putting its results into form. It keeps the thoughts from staggering about. It concentrates attention and effort.

"I am inclined to think, however, that more may be accomplished to redeem the backward through the general organization of the school than by any other means.

"There should be rapid advancement classes, the pupils of which will cover the work of three grades in a year. I have to suggest here two things regarding rapid advancement classes :—

1. Rapid advancement classes should be formed by selecting at the beginning of a term the brightest pupils from all the classes of one of the B grades. These pupils should be made to understand that they are given the opportunity to do three terms' work, say 2B, 3A, and 3B, in two terms, or one year.

2. In order to avoid overpressure, a pupil who has spent one year in a rapid advancement class should spend the next term at the normal pace in an A grade.

"Where there are not several classes in a grade, the same result may be attained by organizing rapid advancement groups in existing classes. The strongest argument in favor of the group system is that it enables the teacher, even when there is but one class to a grade, to advance pupils according to their ability.

"I have often spoken to you of these matters before, but I wish now to call your attention to two types of organization which seem to me of great service in helping backward pupils.

"One of these types I found in Mr. Page's school, Public School 77, Manhattan. This is how Mr. Page describes the work of last term :—

1. Every pupil who fell below during the months of February and March was interviewed individually by the principal or assistant to principal, and communication was held with the parents of all these pupils.

2. On the 21st of April the school was reorganized. All pupils whose promotion was at all doubtful were placed in one class of a grade in which an abridged program was put into operation, special instruction being given in the major subjects in which individual pupils showed weakness. The instruction was individual in many cases. Pupils were coached to overcome their deficiencies. 'The results,' adds Mr. Page, 'have proved the efficiency of the plan. The hold-overs have been cut down to at least one half the usual number, while many pupils have done the work of two grades in one term in the bright class.'

"The objection to this plan is that with slow pupils some parts of the curriculum are omitted.

"The other type of organization to which I invite your attention, I found in Miss Tucker's school, Public School 163, Manhattan. I describe it briefly in Miss Tucker's own words:—

I. AIM — TWOFOLD

- 1st. To assist backward and over-age children towards certain promotion.
- 2d. To strengthen every pupil in his or her weakest subject.

II. METHOD

1st. — Classification of Pupils

At promotion time, pupils promoted to each grade are classified on a basis of his or her weakest subject. In grades where there are two classes, the classes formed would be graded on the basis of weakness in arithmetic and in language. In grades having three classes, classifications would be made on the basis of weakness in arithmetic, language, and manual training subjects.

2d. — Designation of Classes

The new classes are designated and known as

- 4B Arithmetic
- 4B Language
- 4B Manual Training

instead of as 4B¹, 4B², 4B³.

3d. — Explanation to Pupils

To each class is explained the reason for this designation of that class. To every pupil in each class is made clear his or her special deficiency, and the opportunity that this class offers to him, or to her, for remedying it, not only for this term, but for all time.

4th. — Assignment of Teachers

In the term's assignment of teachers, great care is taken to place in charge of each specially designated class, a teacher whose special skill of presentation lies along the line of the subject for which each class is named.

5th. — Programs — Assignment of Time to Subjects

A sufficient amount of time is taken from the unassigned time, to give to each specially designated class double time for the study of that subject for which that class is named. Thus, in 4B arithmetic, twice the regular time is spent upon arithmetic; in 4B language, twice the regular time is spent upon language, and so on.

6th. — Extension of the Plan

In schools where there are a number of classes to each grade, these double-time classes could be formed in every subject.

III. ADVANTAGES

1st. Every pupil in the school receives double time in his or her weakest subject.

2d. As comparatively few pupils are very deficient in more than two subjects, the elimination of one of these deficient subjects practically secures every pupil's promotion.

3d. One term in a double-time language class and one term in a double-time arithmetic class often transforms a C or D pupil into an A pupil.

4th. It saves pupils much loss of time. In one term, a pupil receives the same amount of instruction in his or her weakest subject as he would have received if he had been left back. Thus the same result is attained, and six months are often saved for the pupil.

5th. It tends to encourage the pupils to exert themselves to remedy deficiencies and to make both pupils and parents feel that the school has the children's welfare at heart.

6th. It tends to prevent discouragement among the teachers, by arousing their professional enthusiasm, and by preparing them for specialization leading to promotion to higher grades.

7th. It helps prevent truancy by arousing interest.

"I particularly commend the plan that has been tried successfully in Public School 163, Manhattan. It does not remove the dull pupils from the inspiring companionship of brighter pupils. It does not disturb a school by frequent reorganizations. It is free from the intricacies that too often beset school plans either for succoring the backward or rapidly advancing the bright. It has the supreme merit of simplicity — the merit that characterizes all great inventions."

XIII

PHYSICAL TRAINING

(From the Brooklyn Report for 1888)

EDUCATION includes, as I have said, physical as well as moral and intellectual training. Your rules do not provide for any form of physical training in the public schools. In the new buildings the sanitary conditions are very good; in many of the older ones, especially in crowded classrooms, they are very bad. But in all, the physical health of the children might be improved by appropriate and regular exercise. I find that in fifty schools calisthenic exercises are practiced with more or less regularity. But in the majority of cases this work is so unskillfully done as to be practically useless. To give calisthenic exercises requires training on the part of the teacher quite as much as does the teaching of language or arithmetic. In the Training School Lyng's system of Swedish calisthenics is taught. Writing of this system Miss Bergman, superintendent of gymnastics to the London School Board, has said: "Lyng's Swedish gymnastics were introduced in the London Board schools five years ago. About three hundred and fifty teachers are trained at present, and about twenty thousand girls derive the benefit of their instruction. It is a hard task for the human frame to bend over the school desk hour after hour. The result of this contrac-

tion of the muscles of the chest is seen in our schoolgirls, who, with few exceptions, are abnormally round-shouldered and narrow-chested. Another mischief produced by the bad position during reading and writing is the different position of the shoulders—one generally much higher than the other. For these reasons, and for many more, I think it indisputable that physical exercises introduced between the lessons are a great boon for the growing children. I should like them to have about ten minutes' practice between each lesson, the room being well ventilated." After enumerating the different movements, the writer continues: "After this plan each part of the body is exercised, and we see a great difference between the girls who take gymnastics and those who do not, and every unprejudiced teacher will acknowledge this."

No careful observer can walk through our schools without noticing numbers of children—both boys and girls—who are "abnormally round-shouldered and narrow-chested." In a city where there are so few small parks and where schoolhouses are practically unprovided with playgrounds, calisthenic exercises cannot be neglected in the schools without serious detriment to the rising generation. I recommend, therefore, that a competent expert be employed to instruct the teachers in giving calisthenic exercises, and that such exercises be required in every class at least twice per day.

(From the Brooklyn Report for 1889)

Writing upon the subject of physical training, I had the honor to recommend, in my last report, "That a competent expert be employed to instruct the teachers in giving

calisthenic exercises ; and that such exercises be required in every class at least twice per day."

At a meeting of the principals held recently under the direction of the Superintendent, a report upon this subject was presented by Principals Gunnison, Haaren, and Murphy. After showing that "all systematic training of the body has been neglected or regarded as impracticable" in our schools ; that a system of training which leads to the development of the intellectual part alone, has a tendency to produce many forms of disordered muscular action such as St. Vitus's dance, grimaces, spasms, convulsions, and the like, as well as headaches, nervous exhaustion, and mental derangement ; and that the development of mental power depends very largely upon proper physical conditions, the report makes the following recommendations : —

1. That steps should be at once taken looking to the adoption for our schools, of some plan whereby physical training may be given.

2. That, as in the too crowded classroom, no system of physical training can produce satisfactory results, the authorities be urged to furnish at the earliest possible moment, suitable accommodations, that the limit of attendance now fixed by the Board, in the newer school buildings, *i.e.* 56 to a class, need not be exceeded in any building.

3. As the Lyng or Swedish system seems to be best adapted for the use of large schools, that some means be provided for the fullest examination of the results obtained by the system, from those cities where it is in operation ; and, if possible, that its leading features be tried, at once, in some of the schools of this city.

4. If, on such investigation and experiment, this system,

or any other of similar character, seems desirable and feasible, that a suitable memorial be presented to the Board of Education, asking for such appropriation as may be necessary to engage an expert teacher to give instruction in the subject to the teachers of this city.

Among the principals, though there were slight differences of opinion as to the details of these recommendations, there was substantial agreement as to the main principle involved. The Lyng system, which may be used without apparatus in an ordinary classroom, is taught in the Training School with most admirable results, but the great majority of our teachers are ignorant of its devices. Hence the necessity of employing an expert for at least a brief period, say a year, to teach the teachers. It requires considerable skill and practice to put the Lyng or any other system of gymnastics properly into operation.

The principals and teachers will not wait, however, I trust, for the employment of an expert teacher, desirable as that would be, nor even for an order from the Board, but will proceed without delay to introduce, in their classes, whatever calisthenic exercises may appear feasible. A rule, however, should be adopted by the Board, requiring that at least ten minutes per day be given to physical training in grammar grades, and twenty minutes a day in primary grades.

(From the Brooklyn Report for 1892)

Hitherto, except in a few schools, Brooklyn educators have failed to recognize the fact that there are three departments of education — the moral, the intellectual, and the physical. The intellectual side of education has re-

ceived the lion's share of attention. The moral side, though it has not received the care it deserves, has not been wholly neglected. Physical education, however, except in a very few places, has been left to take care of itself.

Only those who have followed the scientific investigations of this subject are aware how much evil may result from the neglect of physical training in school and the neglect of the very simplest precautions. The disclosures made by Miss Emily M. Mosher, in the *Educational Review* for November, 1892, regarding the physical evils resulting from the habitual postures of school children, came as a revelation even to those who have given considerable attention to the subject. The data and conclusions set forth by Miss Mosher ought to be pondered, and her suggestions put into practice, by every class teacher. Fortunately we have nearly got rid of those dreadful tortures which used to be inflicted on children, when they were compelled to sit in constrained attitudes for long periods, and when the moving of a hand, or a foot, or a head, was regarded as worthy of condign punishment. I use the word "nearly" advisedly, because, not one week before the present writing I visited a school in which I found a "head of department" requiring the children of certain classes to sit during recitation with their arms folded behind their backs. When I pointed out the cruelty of this practice, an order was given to relieve the children from the attitude criticized, but only to have them assume another equally constrained and unnatural. At the word of command, the children leaned slightly forward, rested their forearms on their desks and clasped their hands. This is practically the third position described by Miss Mosher, the effects of

which she depicts as follows: "The third position, namely, with both arms supported, while it is not especially detrimental to health, in time destroys beauty of figure. The trunk is, in shape, an inverted pyramid, poised upon a pedestal—the pelvis. The arms, attached to its base, act as weights, which, by their adjustments, have power to bend and mold the pliable, pyramidal trunk almost at will. Suspended upon the side line, they balance each other. Supported, nay, pushed upward by resting upon chair arms, or desk, they elevate the shoulder blades, with which, by virtue of their intimate union, they are practically continuous. The resultant shape betrays the habit."

Not only should the teacher not require children to assume abnormal attitudes, but she should be constantly on the watch to prevent their assumption. Again, it is the duty of the teacher to see that the temperature of the room is normal when artificial heat is used, to take care that no child's eyes are subjected to strain, and, as far as the apparatus at her disposal will permit, to have the classroom properly ventilated.

All this is good as far as it goes. Physical education, however, means a great deal more. Physical education means exercise adapted to produce certain defined ends. These ends are the development of a symmetrical figure, the strengthening of particular muscles, the improvement of the general health, and the acquisition of grace and activity in movement. All of these things are highly desirable and must be included in any general scheme of education. Your Board has recently taken the first step toward their introduction into the Brooklyn school course, by the adoption for the first time of an amendment to the rules,

authorizing the appointment of a director of physical culture.

Physical exercises in school, besides the advantages enumerated, have a most important effect in relieving the tedium, physical and mental, that results from prolonged attention to study.

SYSTEMATIC WORK IN PHYSICAL TRAINING COMMENCED

(From the Brooklyn Report for 1893)

In September, 1893, systematic work in physical culture was commenced in all the classes of the public schools. Your Board was most fortunate in obtaining as director of this work a person, so well qualified as Miss Jessie H. Bancroft. As instructor in gymnastics in the Normal College, New York, and in other places, she had demonstrated her efficiency before she entered on her work in Brooklyn. Since she assumed her duties here, she has proved herself not only a master of school gymnastics in all its phases, but also tactful, versatile, full of resource, and a teacher in the best sense of that word.

The system of gymnastics which she employs is for the most part German, with some modification from the Swedish system in the progression and arrangement of the exercises to insure the best physiological results.

The plan under which the physical culture exercises were introduced, is this: each principal was asked to designate one or two heads of departments who should receive instruction directly from Miss Bancroft at stated times, drill the teachers in the exercises, and supervise the work throughout the school. As there are over 2000 class

teachers, it is obviously impossible that one person should personally instruct all of them. The plan adopted is, under the conditions, the only feasible plan. It has worked better than could have been anticipated and has resulted in a very large measure of success. Some defects, however, have been discovered. They are not inherent in the scheme, but have been developed through the manner in which it has been administered in the schools. Miss Bancroft has alluded to them in her report, but, for the sake of definiteness, I restate them categorically :—

1. While the majority of the heads of departments have taken up the work enthusiastically and performed the duties assigned to them with great efficiency, their efforts have been in most schools confined, not, I believe, through any fault of theirs, to the primary and intermediate grades.

2. While in some schools the original intent of the plan—that one head of department or, at the outside, two heads of department, should have charge of the work throughout an entire building—has been fully carried out, yet in most schools the principals have not permitted heads of department to supervise the work in the classes under their (the principals') immediate direction. As but few of the principals have taken pains to make themselves experts in the exercises, it is evident that the classes in question are bound to suffer.

These defects are not stated in any spirit of faultfinding, but with the hope that the statement itself will be sufficient to secure their removal. As Miss Bancroft has shown, in three fourths of the classes she has examined, the results are all that could be expected. Poor work is the excep-

tion. Were the original plan carried out in all schools, poor work would rapidly disappear. It is not too much to ask that the principals should resolutely set themselves to rid their schools of the defects that have been discovered.

The benefits arising from the physical culture exercises are already apparent. They are overcoming slight tendencies to deformity, which, when allowed to go unchecked, develop into permanent malformations. They are developing muscular activity. They are improving the carriage. They are teaching children how to breathe; correct breathing is essential to good reading as well as to good health. They refresh the mind when wearied with ordinary school tasks. They cultivate the power of attention, they promote good order, and they stimulate the teachers to look after the hygienic conditions of their rooms. The introduction of systematic physical culture has been one of the most useful steps taken by your Board in many years.

The spot in which we are weakest in this work is the Girls' High School. In that school there is no gymnasium; there is no teacher of gymnastics. I most earnestly recommend that immediate steps be taken to provide gymnastic instruction for the young women of the High School.

The same recommendation holds good for the Boys' High School. A great interest in athletic games — perhaps too great an interest — has been developed among the students. But, as in all cases of this kind, the number of those who participate in the training required to engage in competitive athletic sports, is comparatively small. Athletic sports, as a rule, attract only those who are sturdy and rugged in

physique. The boys who need physical culture most, do not receive it. What is required is systematic physical training for all the boys in this school.

NOTE.—For the further promotion of the physical and moral development of school children in both high and elementary schools, Dr. Luther H. Gulick, Director of Physical Training, Gen. George W. Wingate, Commissioner James E. Sullivan, and Dr. Maxwell, with several others, established in 1903 the Public Schools Athletic League. This League, though outside the direct control of the Board of Education, has to do solely with athletics of public school children and aims to develop the children not only physically, but also morally, in that it tends to take the interest of children from street gangs and turn it in right directions. One of its chief aims is to encourage all boys and all girls to engage in athletic sports. See the City Superintendent's Report for 1904.—THE EDITORS.

XIV

HYGIENIC CONDITION OF SCHOOL BUILDINGS

(From the Brooklyn Report for 1893)

IN all that makes for the health and comfort of pupils and teachers, our new buildings are a great improvement over those constructed up to ten years ago. Though, as already pointed out, many of the worst rooms are no longer used, yet there still remain in old buildings many rooms in which the hygienic conditions are deplorable. The rooms referred to are too small, or have insufficient light, or are badly ventilated. Another defect in nearly all our old buildings, and in some of the new ones, is that the children's outer garments are placed in wardrobes behind the blackboards in the classrooms. There is no need to dwell on the menace to health involved in these conditions. Where the physical well-being and the intellectual advancement of the rising generation are concerned, any reasonable expenditure to eliminate sources of discomfort and possibly of disease would be justified. I most earnestly recommend that your Board urge the city authorities to set apart a sufficient amount of money to put our old buildings into proper hygienic condition.

Even in our new buildings it is not by any means certain that the system of ventilation in use is the best which

modern science has devised. The subject deserves much more thorough study than it has yet received.

The matter of furniture also deserves careful attention. It is of the first importance, for intellectual as well as for physical purposes, that each child should occupy a seat and a desk exactly suited to his stature. If a child is compelled to occupy for five hours every day a seat or a desk that is too high or too low, the result may be most disastrous. Discomfort will certainly produce weariness, mind wandering, and inattention. It may, and probably will, result in curvature of the spine and elevation of one of the shoulders.

The plan thus far adopted is this: a mean height of seat and desk is fixed for each grade. The majority of the desks in each room are of this mean height. One row higher than the mean, and one row lower, are also provided. When we remember, however, that the ages of the children in each grade vary by four years, and that there is a variation of from three to six inches in their heights, it will be at once apparent that the provision for variation in the height of seats and desks is quite insufficient.

Candor also compels me to state that in many instances both principals and teachers have been somewhat careless in taking advantage even of the variations in seating that are now supplied. Principals sometimes do not place classes in rooms seated for the grades to which the classes belong. Teachers are often not careful to seat the taller children in the higher seats.

A distinguished scientist has laid down the following rule with regard to the seating of school children: "The height of the seat should permit easy contact of the whole

sole of the foot with the floor when the child sits well back in the seat, the leg and the thigh being almost at right angles. The surface of the desk should be far enough above the seat to allow the bent elbow to touch it without elevating the shoulder or tilting the body when the hand is raised to write."

While these conditions cannot be realized in all cases at present, they might be much more nearly realized by the exercise of a little more care on the part of principals and teachers.

The only complete remedy would be the use of adjustable seats and desks, and this I most earnestly recommend. Principals and teachers should be held to a strict accountability for the proper use of furniture. The matter is one of supreme importance.

NOTE. — Since this article was written, Dr. Maxwell has strenuously advocated seats and desks that are not only adjustable but movable. — THE EDITORS.

XV

MEDICAL OFFICERS

(From the Greater New York Report for 1899)

IN the preceding pages I have spoken of medical officers. Such officers are not employed either by the Board of Education or any of the school boards. I believe, however that they are necessary to the successful administration of a large system of schools. The duties assigned to them might be as follows : —

1. The physical examination of all candidates for teachers' licenses. Such examinations are now conducted by physicians whose fees for examinations are paid by the Board of Education. At present only those candidates who pass the scholastic and professional examinations are certified to the physicians for physical examinations. As many of the candidates live at a distance, they are put to great inconvenience and expense in coming to the physical examinations, while most vexatious delays are often caused in preparing eligible lists through the failure of candidates to respond promptly to the summons for medical examination. If the Board employed medical officers who gave their whole time to their duties, it would be possible to have all candidates physically examined at the time they take the scholastic and professional examinations, and thus

avoid inconvenience and expense to the candidates and delay in preparing eligible lists.

2. The examination of children reported by principals and class teachers as physically or mentally defective. The importance of this work has been pointed out in the preceding pages.

3. The inspection of the sanitary arrangements of schools and of the work of janitors in cleaning and disinfecting.

4. The inspection of schools with a view to discover those children who are suffering from overwork and need to have school tasks lightened, or who by reason of defective sight or hearing are unable to do their school work properly, but may have their physical defects remedied by special medical treatment.

The money now paid in fees to physicians who examine candidates for teachers' licenses would go a long way in paying the salaries of such medical officers. There cannot be the slightest doubt that the work I have indicated, if performed by skillful physicians, would increase the efficiency of the schools, improve the physique of the rising generation, and by so much increase the sum of human happiness.

NOTE. — The immediate effect of this recommendation was the appointment of two physicians to examine candidates for teachers' licenses. — THE EDITORS.

XVI

THE HEALTH OF SCHOOL CHILDREN

(From the Greater New York Report for 1906)

DR. GULICK, Director of Physical Training, makes a valuable contribution in his report to the history of physical training in this city. He describes in detail the various agencies at work to preserve and improve the health of the children in the public schools.

The first of these agencies is inspection by the Department of Health to prevent the spread of contagious disease.

The second is examination by the physicians of the Health Department to discover physical defects, other than contagious disease, which retard the pupil's progress. The most important of these physical troubles are ocular defects and defects of the nose and throat. It is not encouraging to learn that 30 per cent of all the children in the schools are suffering from ocular defects. No trustworthy estimate has yet been made of the number of children suffering from nose and throat troubles, but the number must be very large. While the Department of Health has been singularly successful in stamping out contagious disease among school children, and in shortening the time, through the employment of school nurses, during which children are compelled to be absent from school by reason of contagious disease, its work is rendered less useful than it

otherwise would be, by lack of means and authority to treat other physical defects. All that can be done is to notify parents of the trouble. Many parents are grateful for the suggestions made and lose no time in putting them into execution either through the family physician or through a dispensary. There is a large residuum of cases, however, where the parents are either too poor or too indifferent to have their children receive the medical or surgical treatment they require. Take the matter of ocular defects. A child is found suffering from myopia. He cannot see the black-board. He cannot see clearly the words on the printed page. He cannot see lines and names on a map. He is set down as incorrigibly stupid. Yet all that he needs is a pair of properly adjusted eyeglasses. His parents are notified. If they are indifferent or too poor, the child will continue to suffer and to lose his chance of success in life, unless a kindly teacher takes pity on him and procures the necessary glasses at her own expense. Principals and teachers have done this noble charity in many instances. Indeed, I know of a school where, largely through the munificence of principal and teachers, a small permanent fund has been established for the purpose of providing poor children with glasses. Yet there are still thousands of children who are suffering through lack of attention to their eyes. It would seem that eyeglasses ought to be provided by the Board of Education for children who need them and whose parents are unable to provide them. A matter of such vital importance to the training of the future citizen should not be left to private charity or to neglect. It is surely poor economy to provide, at the public expense, books and maps and stationery for a child whose vision is defective, if at the

same time you do not furnish him with the means of using them.

Throat and nose troubles are more easily attended to than eye troubles, because their cure, as a rule, requires only a very slight surgical operation. Yet even here parents frequently show an indifference that is astounding. In one school last spring out of one hundred and fifty cases of adenoid growths in the throat, the parents of over seventy of these afflicted children would do nothing to procure them relief. True, they gave their consent to have the necessary operations performed in school by a prominent surgeon attached to a large hospital who kindly volunteered for the work; but a few days afterwards when the Health Department physicians visited a neighboring school solely for the purpose of making an inspection, the school was mobbed by a crowd of ignorant and misguided mothers, among whom the malevolent report had been spread that the doctors were going to cut the throats of the children. I mention this extraordinary incident to show how difficult it is to overcome the prejudice and indifference of ignorant parents when the health of their children is at stake. At present, our only recourse is for the principals and teachers to endeavor to persuade parents to permit the necessary operations to be performed. The city hospitals are most generous in caring for children sent to them from the public schools, when the parents are too poor to have them treated at their own expense.

The positive agencies for promoting the health and developing the strength of our children are the regular physical training exercises, the work of the vacation playgrounds and recreation centers, and the promotion of

athletic sports for boys and more recently for girls through the Public Schools Athletic League. Unfortunately only 83 schoolhouses out of over 500 are as yet provided with gymnasiums, so that this important work is not perfectly carried out.

The more that questions regarding the health of the children in the public schools are studied, the more forcibly I believe it will be brought home to us that the chief cause of poor health and retarded development, next to heredity, is malnutrition. It is not so much that the children of the tenement house have not sufficient food, but that their food is often badly cooked or is of such a character that it does not afford the requisite sustenance, or that their teeth are in such condition as to prevent adequate digestion. Malnutrition is the chief cause, not only of physical weakness, but of mental weakness, and is no doubt largely responsible for the dreadful ravages made by the various forms of tuberculosis. A badly nourished body furnishes a poor support for intellectual effort and, instead of being a barrier against, is a standing invitation to, disease. The Board of Education may do more to promote the health of our children by providing a simple, wholesome mid-day meal at a cost which even the poorest could afford, than by any other means within its power. I urgently recommend that steps be taken to provide cheap luncheons in all our schools.

XVII

A DEPARTMENT OF SCHOOL HYGIENE

(From the Greater New York Report for 1907)

I RECOMMEND as the most important and necessary work to be accomplished at present by your Board the establishment, under your direction, of a Department of School Hygiene. Such a department should be under the direction of a capable medical officer who should have the rank and salary of an Associate City Superintendent. He should have a sufficient number of qualified physicians as his assistants, to examine, physically, all the children in the public schools at least once a year, and a sufficient number of nurses to visit the homes of sick children and to care for slight ailments in school. Such a department should be furnished with a medical library, containing all important literature on the subject of school hygiene whether published in this country or abroad. It should also be supplied with all the requisite apparatus and instruments for making physical examinations and anthropometric investigations.

Further, in case existing laws are not sufficient for the purpose, an amendment to the charter or to the penal code should be sought that would make it obligatory upon parents and guardians to place children, for whom they are responsible, in proper condition, as far as such condition

may be attained by medical or surgical attention, to profit by the education given in the schools.

It should also be made the duty of the medical officer of the Board to prosecute, in court, all parents and guardians who fail in this duty of providing needed medical or surgical treatment for their children.

The chief reasons for the establishment of a Department of Hygiene with the powers and duties described above, are the following:—

1. The conditions of modern city life and of modern school life tend to produce physical defects and diseases in children which, unless remedied at the start, retard their progress in school and diminish their usefulness and happiness in after life.

2. Medical and surgical knowledge has reached a perfection which enables its practitioners to coöperate in the education of children in a way and to a degree never before possible.

3. Teachers stand in constant need of the skilled physician's advice in the treatment and training of children.

4. The influence of such a department is needed, in addition to the influence of the teachers, to give to our enormous alien population new ideals and new habits in the rearing of children and to establish among them American standards of living.

5. The establishment of a Department of Hygiene would be both a direct and an indirect saving in financial expenditure.

6. The present arrangements for the physical examination of school children through doctors employed for the purpose by the Department of Health have been inade-

quate and have not been attended with the desired results.

A few words are added in explanation of each of these six reasons for the establishment of a Department of Hygiene under the direction of the Board of Education.

1. The conditions of modern city life which tend to produce physical defects in children are: Lack of exercise, city children seldom having to walk more than two or three blocks to school and having little work to perform about the home that would develop the muscles and breathing capacity; crowding in poorly lighted and poorly ventilated apartments, which results in various forms of tuberculosis; lack of space for free play; lack of interesting occupation outside of school hours; excessive noise (New York in its crowded parts being probably the noisiest city on the globe); lack of sufficient sleep, owing to noise and excitement; insufficient or unwise feeding, tea or coffee and bread being the principal articles of diet in the tenement house; uncleanly habits of person, owing to lack of bathing facilities and to lack of knowledge of the need for soap and water. These conditions tend to produce various forms of nervousness, lowered vitality, defective eyesight, defective teeth, and probably those growths in the nose and throat which restrict respiration and drive the child into reckless mischief and defiance of authority. Hygienic conditions in the school, though better even in the oldest and poorest school building than in the average tenement, have not tended to alleviate troubles generated in the home and in the street, and in some cases even tend to augment them. The crowding in the tenements has led to the erection of enormous school buildings, which are

also crowded, for in no other way can children in the congested neighborhoods receive the benefits of education. Sitting several hours a day at a desk which may not be hygienically constructed, increases such diseases as curvature of the spine, and often produces faults of posture which the physical exercises of the classroom and the gymnasium barely avail to counteract. Defects in eyesight are certainly aggravated, as will presently be shown, by the work of the classroom. In short, though the school is doing what it may with its present resources—by physical training, by games, by athletic sports, by the maintenance of recreation centers—to neutralize the evil effects of urban life upon children; yet these resources are inadequate because they do little or nothing for those children who are suffering from a physical defect. They are admirable and necessary for those children who are naturally healthy and vigorous; but what a farce it is to urge the boy who is weak through the insufficiency or unfitness of his food, or who cannot breathe properly because of adenoid growths in his throat, to go in for relay racing or cross-country running! Almost as great a farce as to expect the boy with adenoid growths in his throat to behave decently, or to expect the boy who cannot see, to read without the aid of glasses what is printed in his book or written on the blackboard. The conclusion is inevitable; the urban school can do but little for the child suffering from physical defects or weakness engendered by modern urban life until the defects are removed or the weakness strengthened; therefore its resources should be augmented by the establishment of a Department of Hygiene vested with power to discover physical defects in children and to compel parents

and guardians to apply the proper remedies when they will not do it of their own accord.

2. That medical and surgical knowledge has reached a perfection which enables its practitioners to coöperate in the education of children, is a fact not recognized by the general public, but nevertheless true. It is only within the past generation that medical science discovered the laws according to which babies should be fed and tended. It is only during the past generation that preventive medicine, formerly employed only against smallpox, typhus, and plague, has been extended to combat malaria, yellow fever, and tuberculosis. In olden times the province of the physician was generally regarded as confined to the treatment of the sick; to-day that province has been extended to include those measures which are necessary to prevent those who are well from becoming sick and to remove the seeds of disease. Modern science enables the physician to play an important part in the school education of children which a generation ago would have been impossible. Some of the problems which the physician, equipped with the resources of modern science, may help us to solve are the following:—

(a) Problems of posture.—The physician is needed in the school to advise as to the best methods of counteracting bad habits of posture that lead to malpositions of the spine with resulting interference with respiration, circulation, and digestion—results which, under existing conditions, seem inseparable from long hours of sitting. His advice is needed to determine in a general way the kind of furniture to be used, but more particularly and urgently how individual cases of spine malposition may be corrected or at least kept from growing worse.

(*b*) Problems of vision. — There are thousands of children in the schools who cannot profit by the school work because of defective eyesight. Reports from the Department of Health seem to indicate that 6 or 7 per cent of the children who enter the lowest grade suffer from some kind of defective vision. As children progress from grade to grade the proportion of them who are so affected constantly increases, until in the highest grade it is estimated that not less than 40 per cent are afflicted with some form of eye trouble. Is this increase in the number of children with defective eyesight, as they advance through the grades, caused, even partially, by conditions of work in school? If so — and it seems difficult to resist the conclusion — we need medical advice not only to determine the way in which individual defects should be corrected, but also to improve the hygienic conditions of the school — lighting, color of walls, color of writing paper, and size and shape of print — which may or do accelerate diseases of the eye.

(*c*) Problems of nose and throat. — These troubles are constantly on the increase. Only in a small percentage of cases are they, though easily corrected, removed. Scarcely any progress has been made in the discovery of the cause of these troubles, and yet they do more than any other physical trouble, except defective eyesight, to retard the progress of children in school. There are nose and throat specialists in abundance, but none who has made an exhaustive study of the specific conditions found in the schoolroom and yard.

(*d*) Problems of nutrition and growth. — There is a well-founded belief, after all due allowance has been made for

sentimental exaggeration, that there are many children who fail to profit, either in whole or in part, by their education, because their bodies are not nourished. Even if the Board of Education should, as I trust it will sooner or later, provide at cost price a wholesome mid-day meal in all schools, the problem of instructing parents in the feeding of children would still remain. This can be accomplished only through a well-organized corps of medical experts and nurses.

3. A Department of Hygiene is necessary because teachers stand in constant need of the skilled physician's advice in the treatment and training of children. Particularly is this so in the case of nervous disturbances to which, as we all know, city children, because of the conditions of urban life, are peculiarly liable. Nervous troubles frequently beset the child and prevent his getting the full advantage of education, and if unchecked, or if aggravated by school work, may have serious consequences in adult life. The teacher should not be required to shoulder all of this responsibility. He is entitled to expert advice that will guide him in managing the child's school work so that it shall not augment, if it does not remove, the physical trouble. Again, the whole question of school work as it stands related to fatigue, calls for the counsel of the medical expert. Some children are so constituted as to stand without injury five hours of work in school and one or two hours out of school. For other children this amount of work is ruinous — it is simply the beginning of that long disease, their life. Questions of this kind — questions which involve more of medical skill than of pedagogical knowledge — can be conclusively settled only by a trained

medical expert after consultation with a skilled and experienced teacher. They certainly ought not to be, indeed they cannot be, settled by the teacher alone. In the families of the rich these questions are settled — at least sometimes — by the family physician; but we have to deal with tens of thousands of families that have no family physician and little sense of the physical dangers of childhood or the duties of parents. In order to enable the child of the poor man and the child of the neglectful rich man to have equal opportunities, as far as education goes, with the child of the duty-understanding, and the duty-obeying, well-to-do parent, the Board of Education should provide that expert medical advice regarding the school work of children of which every teacher stands in need.

4. The influence of such a department is needed, in addition to the influence of the teachers, to give to our enormous alien population new ideals and new habits in the rearing of children and in establishing among them American standards of living. It is generally admitted that the public school is the most potent influence we possess in converting the vast hordes of foreigners who annually come to our shores into self-respecting, self-supporting American citizens. I would be the last to minimize or disparage this influence. It has wrought wonders in training children to intelligence, efficiency, and civic duty. Even in this very matter of establishing higher standards of living, the modern school, with its example of good housekeeping, with its orderly arrangement, with its lessons in sewing and cooking for girls and in manual training for boys, to say nothing of the other subjects in the curriculum, has accomplished very much. And yet it

will not be able to do its perfect work until we have a Department of Hygiene, equipped to detect the evidences of disease and of improper living, and clothed with the necessary power to enforce its counsel among ignorant or negligent parents. If half a dozen parents in as many different parts of the city were fined or imprisoned for failure, after repeated warnings, to provide their children with necessary eyeglasses or to have adenoid growths removed, the example thus set would do more lasting good than any amount of preaching on the subject. Every time a foreign parent is persuaded or compelled to do something for the improvement of his child's health, he moves a step nearer the American standard of living. Nor is the blame to be altogether laid upon the ignorant Pole or Italian or Russian, that he does not recognize at once, even when duly admonished, the necessity of a surgical operation on his child's throat or of procuring glasses for his eyes. He has had no training or experience that would lead him to a realizing sense of the importance of such matters. Before he came to New York, he lived in the open country or in a small village, where the outdoor life was a powerful preventive against many of the ills to which children become heir when crowded in the slums of a great city. He has not yet realized that the price he must pay for a voice in the government of his adopted country and for greater remuneration for his labor, is liability to many forms of disease, both for himself and his children, that were unknown or unrecognized on his native hills and plains. He has escaped from persecution and the horrors of famine; that he and his children may not fall victims to the diseases that come with the crowded

tenement, he requires the strong protection of the law. A Department of Hygiene under the Board of Education would nobly supplement the work of the Department of Health and of the Tenement House Commission.

5. The establishment of a Department of Hygiene under the direction of the Board of Education would be both a direct and an indirect saving in financial expenditure. It has been shown that there were, in June last, 158,466 children over the normal age in the various grades of the elementary school. As far as I have been able to learn, in the absence of detailed reports which the Department of Health has declined to furnish, at least one third of these over-age children are suffering from removable physical defects. Because of these defects they are unable to do the school work in the time allowed. They remain in the lower grades or in special classes, blocking the way for other children. To this cause must be attributed in no small degree the fact that 75,000 children are, at the present writing, receiving only a little more than half a day's schooling instead of a whole day's schooling. In other words, were all children afflicted with physical defects enabled, through the removal of these defects, to advance at the normal rate of progress, "part time" would be very largely eliminated in our schools. Even the slight experience we have had with the comparatively few parents who have listened to the admonitions of teachers to obey the instructions of the Department of Health, affords strong evidence in support of this statement. The principals are unanimous in the witness they bear to the good effects that flow from the removal of adenoid growths and the cure of defective eyesight. The

following are a few samples of hundreds of statements that have recently been made to me by principals on this subject:—

Pupils are much brighter ; they are more animated, take a deeper interest in their work, and consequently they advance more rapidly.

Excellent progress in children whose vision has been corrected.

Helpful, especially in cases of adenoids and defective vision.

Mental faculties keener. General intelligence greater ; more alert ; quicker in work.

A noticeable improvement in quality of school work.

Marked improvement. In those fitted with glasses and relieved from adenoids and enlarged tonsils the improvement is very great.

Where pupils have been provided with eyeglasses they have improved in studies.

Better attention to studies. Greater ease of concentration.

It has brightened them, as they have been able to give their thoughts to their work.

Where cases have been treated—a decided improvement. The great difficulty is to make the parents keep up the treatment.

Excellent. School work improved. Increased power of attention.

The establishment of a Department of Hygiene, clothed with the necessary power to combat the great evils of physical defects in school children, would not cost any more than the sum appropriated annually to the Department of Health for the physical examination of school children, while the results would be immeasurably better.

But the indirect saving to the city would be even greater. A very large number of children and adults are dependent upon either private philanthropy or state support. This number is divisible into two classes. First, those who are so defective in body, mind, or morals as to make their cases hopeless. These must remain charges either directly or indirectly to the state during the whole period of their lives. There is, however, a very much larger number of

so-called borderland cases, viz. individuals who with judicious care and treatment could become self-supporting in the humbler lines of activity, but who without such special and judicious care develop into members of the great class of paupers, moral defectives, and criminals. It would be one of the first aims of the medical inspection and supervision to increase the opportunities of these borderland cases, to remove those physical defects which are so common in such cases, and which we have recently discovered so seriously interfere with their progress both in intellectual and in moral training. If, as there is good reason to believe, this class is largely recruited from among those who were unable to take advantage of education by reason of physical defects, its diminution through the application, at the school age, of preventive medical skill would mean a saving to the state of many millions of dollars annually.

6. A Department of Hygiene under the control and direction of the Board of Education is necessary, because existing physical examinations made by the Department of Health are generally inadequate, and even where they are adequate are not followed by the desired results.

My reasons for this strong statement are as follows:—

(a) The inspection by the Department of Health is inadequate, because during the year 1906–1907, as is shown by reports made to me by principals, in only 248 schools — less than half the total number — were any examinations for physical defects — as distinguished from examinations to detect contagious disease — made. In these 248 schools not more than one third of the pupils were examined. It is only a few months since any examinations for physical defects were made outside of the boroughs of Manhattan

and the Bronx, and then only because of the criticisms emanating from the New York Committee on Physical Welfare of School Children.

(b) In the majority of cases—at least three fourths of the whole number in which defects are found—the examinations conducted by the Department of Health serve only for the purpose of piling up useless statistics. True, postal card notices are sent to the parents of children in whom physical defects are discovered. But the Department of Health is not clothed with the power and, apparently, has not the inclination to compel parents to remedy these defects. In the cases where the notices have been heeded and defects have been remedied, the good results obtained are almost entirely due to the efforts of principals and teachers.

(c) Dual responsibility in the school—that of the Board of Education and that of the Department of Health—always has resulted and always will result in confusion and inefficiency in the work effected. It is owing to this dual responsibility that the large annual appropriation made by the city for the physical examination of school children is to a great degree wasted. Efficient service will be obtained only when the Board of Education is made solely responsible for all the work that goes on in the schools.

(d) The physicians employed by the Department of Health do not perform many of the functions which it is highly advisable should be performed by a truly educational Department of Hygiene, such as studying hygienic conditions in schools and advising teachers regarding the pedagogical treatment of children in cases of fatigue and nervousness.

(e) The nurses employed by the Department of Health have done good work in visiting the homes of sick children, in giving advice and assistance to mothers, and in looking after slight ailments in school. The fact, however, that they are under the control of an outside organization is a constant hindrance to their work. It is another instance of the evil effects that arise from dual control and divided responsibility. I risk nothing in saying that the school nurses would do much more and better work if they were made responsible to the educational authorities.

For these reasons I urgently recommend that immediate steps be taken looking to the establishment, under the Board of Education, of a Department of Hygiene.

XVIII

SCHOOLS FOR DEFECTIVE CHILDREN

(From the Greater New York Report for 1899)

IN March, 1891, the School Board of London, England, adopted the following resolution :—

That special schools, for those children who, by reason of physical or mental defect, cannot be properly taught in the ordinary standards or by ordinary methods, be established, and that the schools be designated "Schools for Special Instruction."

Since 1891 the children of the London schools have been systematically inspected to discover those who, by reason of physical or mental defects, are unable to perform the ordinary school tasks. The first inspection is made by the teachers, who report to a "Superintendent of the Instruction of Physically and Mentally Defective Children." Each child so reported is examined by the Superintendent and the medical officer of the Board. If the report is found correct, the child is sent to one of the "centers" for the instruction of defective children in which the largest number of pupils under the instruction of one teacher never exceeds twenty.

This systematic inspection has resulted in the discovery that fully one per cent of the children attending the London schools are physically or mentally defective. This number does not include idiots and imbeciles who require

treatment in specially adapted institutions. My own observation leads me to believe that the number of physically and mentally defective children who can do only a small portion of our school work is very large, though not so large in proportion as the number in the schools of London. Every teacher of experience knows that such children cannot receive the training they require in our large classes. Every man who has studied the life around him knows that the defective or the degenerate who is left untrained, grows up a burden to himself and his relatives and a menace to society. The testimony is conclusive, however, that training suited to each individual case can be given which will largely strengthen or overcome natural weakness. The weakness, whatever it be — mental, moral, or physical — is, in nearly all such cases, the result of inherited tendency. Many persons, of whom I am one, believe it to be the duty of the state to prevent the marriage of men and women who are incapable of producing an offspring that is sound — sound mentally as well as physically. But, as long as defective children are brought into the world, humanity demands, the interests of the state require, that such children should receive that training which will, as far as possible, neutralize inherited evil tendencies and develop the good seed that otherwise will have fallen among thorns or by the roadside. And let no one think the task impossible. "We know," says a high authority, "that physical hereditary tendencies can be neutralized and often nullified by proper counteracting precautions. How much more possible, then, to conquer or change inherited predispositions to evil, when we consider that such earnest and judicious endeavor must, in such large measure, enjoy the

blessing and direction and stimulating influence of the Divine, the author of all good and the mighty to save from evil!"

I purpose taking steps at an early day to find out through the Borough Superintendents how many children in the schools are reported by their teachers as mentally or physically defective. When the number has been ascertained, it will then be the province of the Board of Education and the School Boards to determine what medical and educational investigation is necessary to determine whether the children reported fall into the category of the purely imbecile, who are, I believe, beyond the reach of the public school, or whether they belong to the various classes of the defective. It will also be the province of your Board to determine what provision shall be made for the special teaching of these unfortunate children. I would recommend, however, that in the first instance, at least, no very extensive scheme be adopted. My only reason for this suggestion is that to the school authorities of New York the whole subject is a new one. Mistakes will certainly be made in any attempt to solve the extremely delicate problem before us, and mistakes are much more easily corrected when the field of experiment is small than when it is large. I would, therefore, recommend, that "centers" for the training of defectives be established only under the supervision of principals who evince enthusiasm for the work.

Years ago schools for defectives — schools distinct from our noble institutions for the blind and for the deaf and dumb — should have been established in New York and Brooklyn. The present boards can originate no more potent claim to grateful remembrance in the hearts of the

people of this city than by the establishment of schools for the proper training of those children, who, through no fault of their own, are, in the absence of such training, foredoomed to lives of misery and, in the great majority of cases, to lives of crime.

(From the Greater New York Report for 1905)

The necessity and wisdom of special methods of education in the public schools for children who are backward or so defective mentally and physically as to make regular class work of little or no value to them are rapidly being recognized in this country. In the movement for a type of class which will, where possible, make these children self-supporting instead of allowing them to become a charge upon the state, New York City has taken a leading position. Although the work is but young, already a large number of classes for these unfortunates are in operation. These classes are supplemented by a large number of classes for teaching English to foreign children who, while not lacking in mental power, are prevented by lack of knowledge of English from taking the place in the grades which their age and general knowledge warrant. These classes of course are not to be confused with those for defective children. I cannot, however, agree that these classes, where the work of the teacher is solely that of the educational expert in English and common branches, should be under the supervision of the medical adviser. His connection with these classes is merely to determine whether the child's backwardness is due to physical or mental defect, in which case the pupil is a subject for a class for defectives, rather than a coaching class in English. The

physician's beneficent service should stop, I think, with careful diagnosis.

The report on the work among defective children prepared by Elias G. Brown, M.D., contains much of value and interest. In the first place, he reports a large number of new examinations of children and an increase in the number of special classes. It is only to be regretted that as yet it has been impossible to organize enough of these very important saving stations for all who need them. It must be remembered, however, that this work so far has been in an experimental stage. The time of experiment now is ended — the ungraded classes have fully justified their existence — and for the future there remains, as a wise economy and as an act of justice to helpless children, the wide extension of this system. To accomplish this end, the Board of Education has authorized the appointment of an Inspector of Ungraded Classes, whose duty will be to supervise the work of existing classes, to aid in the formation of others, and to train teachers for this special work.

There are a number of significant points in Dr. Brown's report. Some of these are his statements as to the danger of allowing a mentally defective child to remain in a class of normal children and the parents' sympathy with the special classes. His statement as to the blank forms used in diagnosis must be of interest to those having to do with this work, and his division of the children into differing groups for special treatment is worthy of careful study. Of especial interest, however, is his conclusion that many children are defectives because of malnutrition, insufficient or improper food, or nervousness. In discussing improper

diet, Dr. Brown finds excessive use of tea and coffee a potent reason for defect in the child. His remarks upon the use of such stimulants by children should be brought home to every parent ignorant enough to give such beverages to the very young.

The most important conclusion from Dr. Brown's report is that, in many cases, the child is bad or dull, not because of evil propensity, but from some inherited or acquired physical or mental defect which makes it impossible for him to be like his normal fellows. Certainly in this there is a strong argument against the substitution of corporal punishment for the employment of merciful correctives. For the teacher who strikes the child may be striking a little body already diseased and helpless, and so may be visiting in cruelty the sins of the fathers upon the children.

Of Dr. Brown's recommendations, one is distinctly radical, but deserves most careful consideration — the establishment of a boarding school for defective children, with departments for such advanced types as epileptics, the blind, and the deaf. Whether the city should enter a field that is at least partially occupied by the state is an open question, though it may be reasonably argued that if the city is justified in maintaining a boarding school for able-bodied children who do not want to go to school, it would be even more justified in maintaining a boarding school for physically defective children who do want and who imperatively need the advantages of special training. Of such children there are at least three distinct classes in this city — the blind, the deaf, and the crippled. The number of children in each of these classes probably runs into the

thousands. The public schools make no provisions for them. How may the necessary provision be made? In my judgment, boarding schools, at least in the first instance, are not necessary. The establishment of day schools with the necessary equipment and specially trained teachers would meet the exigencies of the situation.

(Here were quoted "authoritative" though anonymous statements regarding the institutions for the education of crippled, deaf and dumb, and blind children in New York City. — THE EDITORS.)

Under these circumstances, can there be any doubt that the Board of Education ought at once to enter upon this beneficent educational work? Should any child be deprived of free public education because it is suffering from some physical defect? Surely not. The time has long since gone by when it could be said that the education of the blind, the deaf, and the crippled is an impossibility. The results of private and charitable effort have proved that these unfortunates may, by skillful training, be made in many cases wage earners and in nearly all cases may be enabled to obtain many of the legitimate satisfactions and enjoyments of life. Why, then, should the parent of any physically defective child be compelled to resort to charity for its education? And why should the parent who would scorn to accept charity, but is too poor to pay the fees charged by private institutions, be deprived of the benefits of free public education? There is but one answer to these questions — the city should establish schools for the training of the deaf, the blind, and the crippled.

NOTE. — The result of this appeal was the establishment of schools for crippled children, deaf and dumb children, and blind children. — THE EDITORS.

CLASSES FOR MENTALLY DEFECTIVE CHILDREN

(From the Greater New York Report for 1906)

Classes for mentally defective children, officially known as ungraded classes, have been in existence for some years. I regret to be obliged to say that they have not been in some cases as well managed as they ought to have been. This fact is due chiefly to three causes: lack of expert supervision, lack of special training on the part of many of the teachers assigned to these classes, and lack of proper discrimination in placing children in these classes. It is true that Dr. E. G. Brown, a member of the physical training staff, has made examinations to determine the question whether children were of such a nature as properly to be classed as defectives. These examinations, while of very great value, have lost a good deal of their efficacy through the lack of machinery to put their results into execution. A very long step toward the reform of this very important part of the public school service was taken last June, when the office of Inspector of Ungraded Classes was created by the Board of Education. The incumbent of this office is Miss Elizabeth E. Farrell, who for ten years was an unusually successful teacher of mentally defective children in Public School No. 1, Manhattan. Since the appointment of Miss Farrell, by-laws have been adopted by your Board, the operation of which, there is every reason to believe, will substantially correct the defects in the management of these classes referred to above. These rules provide in brief that the Inspector of Ungraded Classes shall report to the Board of Superintendents on all applications of principals for permission to organize ungraded classes and

upon the fitness of teachers proposed for assignment to such classes; that no child shall be admitted to or removed from an ungraded class without the approval in writing of the Inspector of Ungraded Classes, or the permission of the Board of Superintendents, and that no child shall be placed in an ungraded class who has not been examined as to his physical and mental condition by the Inspector of Ungraded Classes and by a member of the physical training staff, who shall be a physician.

Experience has amply demonstrated that two things are essential to the proper conduct of classes for defective children — properly equipped classrooms and teachers of peculiar natural gifts who have also had the advantage of special training. With regard to the equipment of the classroom, experience shows that running water in the classroom, proximity to bathing facilities, movable seats and desks, benches for manual training, and apparatus for physical culture, are necessary. It has been demonstrated that bathing is one of the best preventives of evil habits that frequently accompany mental insufficiency, and that lethargic minds may be stimulated, and that mental defects, which would not yield to the ordinary school exercises, may be at least partially corrected, by manual training and physical culture.

One of the chief duties of the Inspector of Ungraded Classes will be to discover teachers who have natural aptitude for the very difficult and delicate work of dealing with defective minds. The teacher who is to take up this work should be peculiarly adapted to it by nature. She should have insight into child nature, affection for children, and ability for leadership. She should be resourceful and

inventive, reaching and quickening the spirit of those who suffer. She should be wise and tactful, not only with children but with adults, for if she is to succeed, she must become the friend and adviser of the family, in order to get the coöperation so necessary to the best work of the child. She must be sanguine, cheerful, optimistic, patient, and have infinite capacity for taking pains. The ideal placed before such a teacher by Professor Royce is none too high: —

Your ideal must be here to get a real, or close, a truly psychological insight into this possibly deranged mental mechanism. You must come now, not any longer as a disciplinarian, but quite sincerely as friend, as humane man offering help to a younger brother in distress. . . . You must be a true naturalist, and study this live creature, as a biologist would study cell growth under a microscope, or as a pathologist would minutely examine diseased tissues. In order to study, you must, of course, love. Minds and their processes must be delightful things in your eyes. . . . Intolerance and impatience have absolutely no place in such a scrutiny. You must fear nothing. You will be very tender with the sanctities of youthful feeling; but if, in the course of your scrutiny, a poor heart gets open to you, and you find it a very evil heart indeed, you will never show — yes, if you are wise, you will seldom feel — any contempt.

Even the teacher endowed with the rarest natural gifts for this work, will find her efficiency vastly increased by an intimate acquaintance with what other great teachers have accomplished in the same line. For this purpose special training is needed. We have not in connection with our city system any department giving special training to teachers of mentally defective children. Under these circumstances, it has been deemed wise by your Board that opportunity should be given to the teachers of such classes, to obtain the training that they need in institutions which exist for the purpose in other parts of the country. Hence, the following by-law was adopted: —

Upon the recommendation of the inspector of ungraded classes, a teacher assigned to an ungraded class may be given a leave of absence with full pay for not more than three months within the school year by the Board of Education, on the recommendation of the Board of Superintendents, for purposes of study in a school for the training of teachers of defective children. A teacher to whom such leave has been granted shall report to the inspector of ungraded classes as the latter shall require.

NOTE.—In 1912, a department for the training of teachers of mentally defective children was established in the Brooklyn Training School for Teachers.—THE EDITORS.

XIX

TRUANT SCHOOLS

The Parental School with its farm of one hundred acres and its magnificent buildings was the result of the following discussion. The compulsory education law has been amended in accordance with the suggestion contained in the last paragraph. — THE EDITORS.

(From the Greater New York Report for 1899)

TWO schools for truants who are no longer susceptible to ordinary school influences are maintained, one by the School Board of Manhattan and The Bronx, the other by the School Board of Brooklyn. The school systems of Queens and Richmond are too small to maintain effective truant schools. They pay for the support of their supposedly incorrigible truants in institutions outside the city limits. To my thinking, it is not consistent with the dignity and prestige of our city that any of its divisions should be obliged to go outside its own limits in order to find necessary school accommodations.

I recommend, therefore, that the necessary legislative action be sought to place all truant schools under the care of the Board of Education, to the end that they may be open to the truants committed to such institutions from any part of the city. A considerable expenditure of money will be needed to supply adequate provision for the confinement and training of truants. The Manhattan truant school is

housed in a small and unsuitable building, without grounds, in a densely populated section of the city. The Brooklyn school has ample grounds, but an antiquated and defective building. The city of New York should have one truant school, or perhaps two such schools, situated far from the centers of population, surrounded by ample grounds, and supplied with every facility for manual training, gardening, farming, and trade teaching, as well as the ordinary school appliances. Experience has abundantly demonstrated that the truant may be cured of his roving propensities by the exercise of kindness mingled with firmness and by continuous application to labor. One institution of this kind, adequate to the present needs of the whole city, could easily be maintained for the amount it now costs to support the two truant schools in Brooklyn and Manhattan.

Should schools or classes for defective children be established, I should confidently look for a diminution in the amount of truancy, because physical and mental defects are potent causes in rousing children to rebellion against the work of the ordinary school. It is safe to assume, therefore, that if the defectives were subjected to appropriate training at an early age, say seven or eight years, the ranks of the truants, who generally develop their peculiar propensity at about ten years of age, would be considerably diminished. Still, however, we shall always have truants, and these will almost certainly become criminals if they are not furnished before the years of adolescence with an entirely new outfit of habits. For such as these a truant school—a place of confinement and a place of labor—will always be necessary.

The work of truant schools is seriously hampered by the provision of the existing law which requires that all the inmates shall be discharged at the expiration of the school year — July 31. Experience has demonstrated that less than a year's treatment is, as a rule, of little or no avail to enable a truant to acquire those habits of order and industry without which success in life, of even the most moderate kind, is impossible. To make these schools properly effective, it should be possible to commit a supposedly incorrigible truant until he shows unmistakable signs of improvement, or has reached the close of the compulsory school age. In no case should a truant be confined beyond the age of sixteen in a truant school or other institution to which truants may be committed. Above that age boys or girls who are not amenable to the discipline of the school or the home are fit subjects for reformatories.

XX

SUMMER SCHOOLS AND PLAYGROUNDS

(From the Brooklyn Report for 1889)

THE average attendance upon the public schools of this city is about 75,000 children. For those of them who have intellectual resources, such as games, books, and pictures, in their homes, and who can exchange the atmosphere of the school for the atmosphere of the seaside or the mountains, the long summer vacation is a most excellent thing. But probably not 20 per cent of our school children possess all these advantages. What of the other 80 per cent? For them there is no sojourn at the seaside or among the mountains. For them there are the hot and dusty streets. For them there is little enjoyment or profit, either physical or intellectual, from the long vacation. They return to school in the fall, with their physical powers benefited little if at all, and with their minds relaxed, dulled, and often perverted.

Were they given the opportunity of attending school three hours every morning during the summer, say from eight to eleven o'clock, they would, I am confident, derive more physical benefit than is now possible from the long vacation, while their mental powers would be kept in a condition of healthy activity. I submit this proposition for the consideration of your Board, as one eminently worthy

of attention. The experiment might easily be tried without great expense in a few schools situated in different parts of the city, and, if successful, the scheme could be extended.

VACATION SCHOOLS AND PLAYGROUNDS

The recommendation for the establishment of summer schools first made in 1889, bore fruit in 1899, when ten schools, with an average attendance of 4434 pupils, were maintained in Manhattan, and five schools with an average attendance of 1609 pupils in Brooklyn. Upon these activities Dr. Maxwell makes the following comments. — THE EDITORS.

(From the Greater New York Report for 1899)

While the vacation school is still in its infancy, it is destined, I believe, to play a large part in future in our educational economy. Especially in the tenement-house district it has been a great blessing to those children who became its pupils. The pity is that so few children attended. To watch a few hundred children in a vacation school on the lower east side of Manhattan, thoroughly enjoying their sewing, or drawing, or painting, or woodwork, and then to see the thousands of children making futile and unintelligent attempts at play in the broiling streets outside, presents a contrast which causes one to regret that no effective way has been discovered to bring home to the minds of fathers and mothers in the tenement districts the advantages of the vacation schools. The movement, however, will undoubtedly grow, and year by year, if more liberal appropriations are made for the support of these schools, it may be expected that the people will more generally learn to appreciate their usefulness.

I must commend particularly the work done in these schools in nature study, in water colors, in sewing, and in

woodwork. Much excellent work was also done in the kindergartens, though in some of the Manhattan schools it was seriously retarded by the selection of unsuitable rooms from which the ordinary school furniture had not been removed. To attempt to conduct a kindergarten class in a room filled with seats and desks suited to children twelve years of age, is a mistake that should not be repeated.

Besides the purposes for which they were more immediately instituted, the vacation schools have developed a possibility that will, I have no doubt, be of great service to the whole school system. They may, in a sense, be regarded as experiment stations that will supply valuable suggestions as to work in the regular schools. For instance, nature study, which has been nearly everywhere a failure in the regular schools, was rendered, comparatively at least, a success in many of the vacation schools, by employing qualified persons to collect and distribute specimens for individual study. If this plan were adopted in the day schools, it would very soon render this study, as it ought to be, one of the most interesting and useful in the curriculum.

Another excellent feature of the vacation schools was the reading room, in which those children who desired to do so, could spend a quiet hour in the perusal of wholesome and interesting literature. The circulating libraries that furnished the necessary reading matter deserve the thanks of the school authorities.

In connection with the vacation schools in Manhattan, rooms in many school buildings were opened to the citizens of the neighborhood for purposes of reading and quiet amusement. It is earnestly to be hoped that this movement will be continued throughout the year and extended

to all the boroughs. No good reason can be given why the school buildings erected and maintained at the public expense should be occupied only five or six hours a day, when they might easily be used as public library stations and centers of rational amusement.

I commend to the consideration of the School Board of Queens the propriety of establishing vacation schools in the more densely populated parts of Long Island City.

The playgrounds or schools organized by Manhattan and Brooklyn were, on the whole, less successful than the vacation schools. There needs to be much careful experimentation and recording of results before it can be even approximately determined just what games should be used and what system of discipline should be maintained in public playgrounds. The conduct of playgrounds on the recreation piers was, as I saw it, of doubtful propriety. The question is open to discussion whether the school authorities should conduct any educational exercises amid surroundings which they cannot control and which sometimes do not tend to elevation of character.

NOTE. — From this small beginning in 1899 the vacation schools and playgrounds increased, until during the summer of 1912 there were 33 vacation schools with an average daily attendance of 25,812, and 220 public school playgrounds with an average daily attendance of 124,135. — THE EDITORS.

SUMMER HIGH SCHOOLS

Dr. Maxwell's advocacy of summer sessions of the high schools was, after the lapse of five years, crowned with success in 1912, when two summer high schools were established. — THE EDITORS.

(From the Greater New York Report for 1907)

The principals of the high schools are unanimous in declaring that the largest number of students who leave the

high schools, leave during the long summer vacation. They either find employment for the summer months and do not care to forsake it to return to school in September, or they become so enamored of freedom that school work thereafter loses its charms. Moreover, there are many hundreds of children who graduate from the elementary schools in June who are lost to the high schools through similar causes. Again, there are many over-age students and many bright and ambitious students who would be glad of an opportunity to shorten their course of preparation for college or training school by taking advantage of a summer high school course, as college students now shorten their college courses by attending summer college courses. The advantages of summer high school courses may be enumerated as follows: —

1. They would lessen student mortality.
2. By concentrating attention on one or not more than two courses, it would be possible for the teachers to do more than can possibly be done in the regular high schools in the way of teaching students how to study.
3. They would give over-age or backward children an opportunity to shorten their high school course by allowing them to make up a study in which they failed the previous term in one of the regular high schools.
4. They would give bright and ambitious students a chance either to shorten their preparation for college or training school, or to study a subject or subjects which otherwise they would be obliged to omit by reason of lack of time in the regular course.
5. They would provide continuous work for the pupils who graduate from the elementary schools in June.

6. They would enable us to utilize to fuller advantage our costly high school buildings.

As to the management of the summer high schools, I offer the following suggestions : —

1. The length of the summer course should be not less than seven, and not more than eight, weeks.

2. Students should not be permitted to take more than two studies.

3. The daily session should extend from 8 A.M. to 12 M.

4. At least one hour a day should be devoted to study under direction.

5. Half an hour a day should be devoted to exercise in the gymnasium.

XXI

CONTINUATION VS. EVENING SCHOOL

(From the Greater New York Report for 1911)

THE most unsatisfactory part of the evening school work is the elementary schools. These are attended largely by boys and girls who did not complete the course in the day elementary schools, and who went to work without adequate preparation for the duties of life, as soon as the law permitted. They do not attend regularly, and they do not derive as much benefit as they need from their studies. The reasons are obvious. On the one hand, they come to evening school tired out with a long, hard day's work. They need to sleep or to play, rather than to study. On the other hand, we give them only a diluted form of the day school curriculum. They do not recognize the use of the lessons in reading, history, and arithmetic. What the teacher presents is without special interest for them. They approach their studies without energy and consequently without profit. Under these conditions there need be little wonder that the elementary evening schools are not more successful than they are. The wonder is that the attendance and interest are not worse.

After observing and studying these schools for thirty years, I am now convinced that the attempt to give instruction in the ordinary elementary branches in the

evening to boys and girls from fourteen to sixteen years of age is a mistaken policy. Those who are employed during the day need the evening for exercise and recreation. Only those who are endowed with unusual physical strength and unusual mental energy can, after a hard day's work, attend school four evenings a week and benefit thereby. That they need instruction, for their own sakes and for the sake of the community, goes without saying. How and when are they to get it? It has been demonstrated over and over again that they do not get it advantageously when the school time is taken out of their time for recreation — the evening hours. It follows that, if they are to get it at all, they must get it out of their employers' time. I recommend, therefore, that in lieu of the evening elementary schools, a system of continuation schools from 7 to 9 A.M. and from 4 to 6 P.M. be organized, that legislation be sought to require employers to give to each employee under nineteen years of age four or six hours a week for forty weeks each year, and to constrain young people between these ages to attend such schools regularly. These schools would become true continuation schools; that is, they would continue under favorable conditions the education, even while the boy or girl is at work, which was broken off at any year below the nineteenth. An effort too should be made to adapt the work of these schools to the individual capacities and needs of each pupil. To this end the coöperation of employers should be sought not only to inform the teachers as to the special needs of each pupil, but to require the pupil's attendance.

Money is being spent most liberally on the education in splendidly equipped high schools of those boys and girls

who are so situated that they can make school-going the chief business of their lives until they are at least eighteen, and often much longer. Are the state and the city to take so little interest in the less fortunate, who are the great majority, that all the education they can offer them is the three R's at the period of the day when the brain refuses, or is too weary, to act? Are employers to have the best of the child's day at toil that is often grinding and poorly remunerated and leave him little if any chance to cultivate those functions of mind and body upon which success and happiness in after life depend? The interest of the community as well as of the individual demands that the child who has not the opportunity to pursue a high school course or even to complete the elementary school, shall be kept under the tutelage of the state and shall be given such schooling as he can profit by, until the end of the high school age. Employers will in the end gain by the arrangement, because with improved training their youthful employees will become more efficient and hence more valuable. The community will be the gainer because the average of the efficiency and intelligence of its citizens will be raised. But the greatest advantage will come to the individual, who will study when the mind is not worn out, and who may still spend the evening in wholesome recreation with his fellows.

XXII

SCHOOL LIBRARIES

(From the Brooklyn Report for 1891)

A WELL selected school library for pupils' use ought to be a part of the equipment of every well appointed school. In lieu of this, some arrangement ought to be entered into either with the Brooklyn Library or with the proposed new city library, by which approved books would be loaned to the children of the public schools. The extent to which the Pratt Library and the library of the Union for Christian Work are used by the school children of their respective neighborhoods, is evidence that such action by your Board would be amply appreciated. Indeed, I confidently look forward to the time when every public school will be a distributing center for a great free public library.

ELEMENTARY SCHOOL LIBRARIES

(From the Greater New York Report for 1902)

Much discussion has been wasted as to whether we should have in the elementary schools, school libraries, or class libraries, or grade libraries. If by "school library" is meant a reading room sufficiently large to accommodate many readers at one time, such a library is even more out of the question in the elementary school than in the high

school. Sufficient space cannot be found or provided for that purpose. Even if it were desirable, the school library, in the sense in which I am using the term, is impossible.

If, on the other hand, by the term "school library" is simply meant a room in which the library books are stored and which is not intended as a reading room, experience shows that the plan operates, as in the case of the high schools, to prevent the general use of the books.

If the library books are to be generally used by the pupils, they must be scattered through the classrooms where they may be easily found. If this principle is correct, the question then arises as between class libraries and grade libraries. A little observation and reflection will convince any intelligent person that in our large schools the class library is impossible. There are about 10,000 classes in the elementary schools. We have not the means to provide 10,000 libraries. Nor is it necessary to do so. A well selected library for each grade in a school is quite sufficient, no matter how many classes may be organized in a grade. In the lower grades the number of books in the grade library will necessarily be very small and comparatively inexpensive. As we approach the highest grade the libraries will be more extensive and more costly. In the four highest grades, where departmental teaching is gradually effecting an entrance, the grade libraries should be departmental, as in the high schools. There should be in each school in which these grades are taught a history library, a geography library, a literature library, an art library, and an elementary science library.

In addition to the grade libraries, there should be in every school a well selected library of books of reference

and of works on principles and methods of teaching and on school management for the use of teachers.

The selection of books for grade libraries has been under consideration by a committee of the Board of Superintendents and is now approaching completion. When this work is finished, there will remain only certain mechanical difficulties, such as the provision of shelving for the books in classrooms, and the ordering, supply, and cataloguing of the books. Fortunately, in the boroughs of Manhattan and The Bronx, where grade libraries have been established in most schools for several years, the mechanical difficulties can scarcely be said to exist.

With the completion of many other urgent tasks required by the reorganization of our school system, it will be possible in future to devote more time to the consideration of this subject. The great object of the school library is not so much to supply information as to cultivate the reading habit, to create a love for what is good in literature, and to teach the right way of using books when information is sought. By establishing grade and departmental libraries in all classes of schools we may do much to secure these ends.

The public libraries ought to be brought into close relation with the public schools. Their treasures cannot be used to better advantage than in ministering to the intellectual and moral development of the young.

NOTE. — Dr. Maxwell's recommendations as to grade libraries and reference libraries for teachers were put into effect almost immediately. Since 1902 the state library fund and an equal amount appropriated by the city, amounting to about \$55,000 per annum, have been expended in developing these libraries. The total circulation of books from these libraries amounted in the school year 1911-12 to 9,570,878. — THE EDITORS.

XXIII

DEPARTMENTAL TEACHING IN ELEMENTARY SCHOOLS

In conference with the principals of elementary schools, Dr. Maxwell suggested the introduction of departmental teaching in the higher grades of the elementary schools. This plan had been tried successfully in Brooklyn prior to consolidation. In the following pages the theory and practice of departmental teaching in the grades are discussed. — THE EDITORS.

(From the Greater New York Report for 1903)

OF the many changes brought about in the local schools, none probably has been provocative of more serious discussion than the wide adoption by principals of grammar schools of the system of departmental instruction as a substitute for the class-teacher plan. Under the old class method, each teacher was in charge of a single class to which he or she taught all the subjects of one grade. Under the departmental program several teachers are assigned to instruct each class in the three highest or, more often, in the two highest years of the elementary course. The method of division is on the seemingly logical basis of subject rather than of groups of children. For instance, one teacher who has a special aptitude for such a branch as is shown by her ability to obtain a higher or specialist's license, will be assigned to teach mathematics in the last two or three years; a second will do similar work in English; a third will be placed in charge of the teaching of

elementary science, and so on until the subjects are all apportioned among those specially qualified to teach them. Such divisions, however, are not arbitrary. A teacher with more than one specialty may, if the program permits, give instruction in two or more branches, or, if the classes be numerous, two teachers may share the responsibility in certain subjects.

In theory, this plan of having children taught specific subjects by those with special ability to impart the content of those branches, seems almost axiomatic in its superiority over a system where one teacher gives instruction in all branches of one grade. Educational theory, however, unfortunately does not always accomplish expected results, and in public school systems results, not theories, are the aim and end. The substitution of a plan of this nature for the old class system of tuition involves, of necessity, radical changes in school organization. Young children must be moved from study hall to recitation room at the beginning of each period, or else, if they be assigned to permanent rooms, must accustom themselves at each period to a new teacher who visits them. The question arises, therefore, as to whether the change from the "mothering" plan, where the instructor has complete charge of a class throughout a term, to a system of divided influence and movement, is in practice a beneficial innovation. Considerations of conduct and of ethical influence enter into the discussion as well as those of instruction. It is most difficult under any circumstances to predicate the effect of a theory of education before its actual employment and, in a cosmopolitan city such as New York, it is impossible to foretell results of important innovations with absolute accuracy,

for the reason that there is no means of determining what constitutes the typical class of pupils.

For these several reasons it was not considered wise to make departmental teaching compulsory in the schools. No principal was required to inaugurate the plan. The wide introduction of this system which now prevails in 132 schools is attributable solely, therefore, to the choice of the principals who were entirely free to continue the old plan or to experiment with the new as their judgments prompted. The system had been discussed at a conference of principals some months ago, but while the apparent advantages and possible disadvantages of this plan in its application to the last two years of the course were analyzed freely, no insistence upon the new order was advanced officially. Possibly this free discussion bore some fruit, and doubtless the new course of study, with its ready adaptability to such a plan, also prompted many to try the experiment. But in each case the principals were entirely free to do as they deemed wise for their particular schools.

The fact, however, that 132 principals are now employing departmental teaching is not in itself conclusive. Nor would any discussion of the problem from the theoretical standpoint be entirely convincing. I have considered it wise, therefore, to go to practice and its actual results for my answer to the question, "Is departmental teaching in the elementary schools a good thing, a hurtful thing, or a plan without special effect?" Those best fitted to answer this question, it seemed to me, were the principals of the schools in which such instruction is now in actual use. Therefore I sent to all principals of elementary schools the following circular letter:—

December 11, 1903.

TO PRINCIPALS OF ELEMENTARY SCHOOLS:

LADIES AND GENTLEMEN: Will you kindly write answers to the accompanying questions and send them to me not later than December 18, 1903?

Respectfully yours,

WILLIAM H. MAXWELL,

City Superintendent of Schools.

1. Have you introduced the departmental system of teaching?
In what grades?
How many teachers are working in this way?
2. What is the effect on the teachers?
(a) Interest in work?
(b) Methods of teaching?
3. What is the effect on pupils?
(a) Interest in work?
(b) Results of work?
(c) Conduct?
(d) Penmanship?

To the question, "Have you introduced the departmental system of teaching?" 132 principals replied in the affirmative. The other questions were answered with few exceptions in each case. These replies I have tabulated most carefully, giving to doubtful verdicts their exact value. In summarizing these results I have endeavored to eliminate my own very positive views in favor of the new plan and to give, as far as possible, an unbiased digest of the opinions of the principals actually doing this work. This summary follows:—

STATISTICAL RESULTS

Number of schools in which the departmental system is employed:—

Borough of Manhattan	.	.	.	.	.	.	.	71
Borough of The Bronx	.	.	.	.	.	.	.	11
Borough of Brooklyn	.	.	.	.	.	.	.	19
Borough of Queens	.	.	.	.	.	.	.	23
Borough of Richmond	.	.	.	.	.	.	.	8

Total number of teachers thus employed, 827.

Ten other principals reported that they intend to introduce departmental work in 1904.

Three principals replied that they had tried the plan in the past and had abandoned it.

In answer to the question, "In what grades?" 97 reported that they were using it throughout the last two years of the course; 10 replied that it was in use in the work of the last year, and 25 gave replies which can be summarized only as "scattering." These use the system from the fourth year up in all possible combinations.

(Then follows a tabulation of the opinions of the principals)

After a careful analysis of all the returns, I find myself sorely tempted to give to departmental teaching as a device for New York schools a somewhat less reserved commendation than the results at present fully justify. There is always present, in statistical considerations, a tendency to look upon the data compiled as being complete and as not being modified in any way by the broader questions which enter into every educational problem. There is also the temptation, when a plan theoretically very promising shows numerically great instances of success or actual benefit and a larger proportion of instances where no deterioration has resulted after brief trial, to overlook future possibilities in practice and to yield unreservedly to the call of attractive theory. Just such a condition as this is introduced into the present discussion by the small number of those who vote against the plan in the several particulars.

It must not be forgotten, however, that the answers to these ten or twelve questions, no matter how carefully they are prepared, cannot exhaust the entire subject or determine final judgments. Many considerations not definitely touched upon by any of these questions must be weighed. In the first place many of the schools have not tried the plan, and it is as yet somewhat hazardous to predict that what is successful in many classrooms and not successful in a few would be an educational boon to all. Furthermore, those who have tried the plan have, in most instances, been experimenting with it but a short time. All have not yet been able to watch the growth of the child through all the grades in which this system is used. A third consideration is the fact that a new course of study has just been put into operation and has called upon the teacher for accommodation to new conditions entirely apart from the novelties of the specialist system of instruction. This raises the question as to whether some of the lack of success may not be due to the difficulties of enforcing a new curriculum rather than to defects inherent, for particular cases, in departmental work. This phase of the discussion makes the schools in which a lack of success is reported the central point of interest, and their subsequent development under this plan must lead to results which will be of great value.

There is, however, a question somewhat divorced from the actual elementary school which is of great importance. This is, "What will be the effect of departmental teaching on the child when he has entered the high school where such a system of necessity prevails?" In the past it has been found that the child, transferred suddenly from the "mothering"

influence of the class-teacher plan of the elementary school into the high school's atmosphere of freer self-activity with its consequent insistence on greater self-responsibility, has found it most difficult to adjust his faculties to the novelty of being to a great extent his own master. In many cases it has taken nearly a full year, more or less wasted, for the child to become used to being responsible for himself in action instead of being to an extent the automaton moved at the behest of some person especially charged with his government throughout the school day. The problem of accommodation has, in not a few cases, proved too difficult, and the result has been that many children, dazed by freedom, confused by liberty, perplexed by the necessity for self-settlement of questions, have grown disheartened and have left the high schools in the first year of their course. This is indeed a serious matter and one demanding solution. The only possible remedy seems to be to accustom the child, by degrees and in familiar surroundings, to a moderate amount of self-governing in his elementary school life. Will this prove to be a cure? It is too early to say, because as yet no large number of departmentally trained children have entered the high schools. The only evidence is the hint here and there from schools in Queens and Richmond which have all grades, that the effect in high school is good. It would seem wise, therefore, to wait until this body of evidence from the secondary schools can be adduced and added pro or con to the score of departmental success or failure ere a final verdict be recorded.

It is true that in most cases considered the interest of teachers has been greatly enhanced, and that their methods have shown the improvement to be expected of the spe-

cialist. It is true also that the interest of the children in a majority of cases has been augmented and that results which are all that could be desired have been obtained in a large number of schools. Discipline, save in rare instances, either has been improved or else has not suffered. Penmanship seemingly is not entirely satisfactory, but the instances in which this is to be attributed, without question, directly to departmental work are not many. There is room for doubt whether the somewhat unsatisfactory results in this branch are not due in great part to a faulty method of departmental work, or to an unnecessary neglect of the subject. Certain it is that not a few have obtained very satisfactory results — a fact which seems to fix responsibility more or less upon the differing personalities of the teaching corps. Still there should be a further scrutiny of the teaching of this branch.

These matters taken into consideration with the facts that the replies have come from schools dealing with all types of children and all sorts of racial and civic problems, from schools in crowded districts, from schools in the open, from boys' schools, from girls' schools, from mixed schools, and that no principal employing the plan has convicted it unqualifiedly of worthlessness, all tend to optimism. The broader considerations, however, impel conservatism. In closing, therefore, I shall say merely that the results confirm me in my belief in this logical theory, now partly tried out, but do not seem to warrant radical confirmatory action. I recommend, therefore, that for a year at least the departmental system of teaching be not made compulsory in the last two years of the course; that, in view of all the facts, the principals be permitted to

introduce the system if they so desire ; and that the workings of these departments be scrutinized carefully for the next twelve months with a view to obtaining a body of data which will warrant definitive legislation. Of the outcome, however, I have little doubt.

XXIV

TEACHERS' SALARIES

(From the Greater New York Report for 1907)

THE year 1906-1907 will be memorable for an agitation carried on by the women teachers in elementary schools and high schools to secure legislation making it mandatory upon the Board of Education to pay the same salaries to women that are paid to men.

For a full understanding of the facts and conditions out of which this agitation arose, it is necessary to state briefly the history of teachers' salaries in this city since consolidation. When consolidation took place in 1898, three city school systems, nearly a score of village school systems, and nearly one hundred rural school districts were brought together into one system. There was a different method of paying the teachers found in each of the component parts of the school system. The method of raising money for the support of schools, under the new charter, was such that the distribution of the fund for the payment of teachers' salaries among the various local organizations resulted, as many of them believed, in great injustice. We struggled along, however, for three or four years under very great financial difficulties, which caused serious injury to the school system and kept up constant irritation and agitation among the teaching force. These difficulties

reached their culmination in the school year 1899-1900, when, for months, no salaries were paid to teachers in the boroughs of Queens and Richmond, when the salaries of many teachers were arbitrarily reduced in order that the salaries of other teachers, specially favored in a legislative enactment known as the Ahearn law, should be increased. So great was the unrest and so impossible did it seem to overcome the difficulties occasioned by the smallness of the appropriation and the rivalries of borough school boards that a comprehensive measure was introduced into the legislature by Senator Davis to regulate the entire subject of teachers' salaries in this city. Senator Davis's bill provided that a tax of four mills on each dollar of assessed valuation of real and personal property in the city should be levied for the purposes of the General School Fund, from which teachers' salaries are paid, and that certain minimum salaries should be fixed for the several classes of teachers. Unfortunately, the schedules of salaries provided by the Davis law were drawn up by a legislative committee after conference only with representatives of different teachers' organizations, and without reference to an harmonious underlying scheme or plan. The result is that the salary scheme contains many incongruities and inequalities. While the salary schedules provided for minimum uniform salaries for each grade of teacher throughout the city, they were modeled chiefly upon the schedules that had prevailed in the old city of New York, and thus were made to provide considerably higher salaries for men teachers than for women teachers. For women teachers in elementary schools the schedules provided for one grade of salary for teachers teaching in

any grade from the kindergarten to the 6B grade, inclusive; a little higher salaries for those teaching grades of 7A, 7B, and 8A; and a still higher salary for those teaching the 8B grade or graduating class. For men teachers, the bill provided two salary schedules for elementary schools: one for teachers of any grade below 8B; the other, a higher salary, for teachers of the 8B grade or graduating class. In the case of principals of elementary schools, a difference of \$1000 a year was made between the salary of a woman principal and the salary of a man principal. In the same way, salary schedules were provided for women and for men in high schools.

While it must be admitted by any one who has closely studied the subject that the Davis law is ambiguous in some of its provisions, and that it is unjust to women in many respects, it may also be successfully maintained that it put an end to an almost intolerable condition with regard to teachers' salaries. Certain it is that from 1900 up to 1907 we enjoyed almost complete freedom from agitation for change or increase of salaries. Under these circumstances I cannot but regard the Davis law as having been of very great advantage to the schools. I sincerely trust that it will be maintained on the statute book as a defense against capricious changes in teachers' salaries, until something better is provided.

It was almost inevitable, however, that sooner or later the women teachers would revolt against the discrimination in salary made against them by this law, and in favor of men. After much discussion between them and members of the legislature, a bill was finally agreed upon and introduced by Senator White, of Syracuse, the most im-

portant provisions of which were: (1) that the educational tax of four mills established in the Davis law, which had afterwards been reduced to three mills, should be restored; (2) that the principle of "equal pay for equal work" should be established by law; and (3) that any officer or teacher who exercises supervisory duties over other teachers must receive a salary higher than any teacher supervised.

This bill was passed by both houses of the legislature, was vetoed by Mayor McClellan, was then repassed by the legislature over the Mayor's veto, and was finally vetoed by Governor Hughes.

Now that this agitation is over for the present, it is profitable to consider briefly the main provisions of the proposed legislation and some fundamental principles which ought to be carefully taken into account in any revision of the law governing teachers' salaries. The most important provision of the proposed law was that requiring "equal pay for equal work." In support of this provision the argument made is that women frequently teach quite as well as men teach, and that some women teach a great deal better than some men teach — a statement which is undoubtedly true; and second, that salary should attach to a position and should not depend upon the sex of the incumbent. These arguments containing, as they do, a considerable amount of truth, are very plausible and have won the support of many persons in the legislature and throughout the community in support of the principle of "equal pay for equal work." It must be pointed out, however, that arguments such as these proceed solely from the teacher's point of view. They do not take into consideration either the ability of the taxpayer to pay increased

salaries or the interests of the children in the schools. If there is to be "equal pay for equal work," it can come about in only one of two ways: either men's salaries must be reduced to the rate of salary paid to women, or women's salaries must be raised to the rate of salary paid to men. In the former case — a reduction of men's salaries — it is perfectly clear that we shall not be able in future to get strong men to enter the teaching profession in this city, and that the strong men who are now employed in the schools will leave and seek more remunerative employment. Under such conditions only the weaklings among men would remain. If, on the other hand, the second alternative is taken and women's salaries are raised to the rate of salaries paid to men, the expense to the city will be enormous. According to calculations made by Auditor Cook, had Senator White's bill passed, the increased cost of teachers' salaries would have been between eight and nine million dollars for the present year. Owing to the recent disturbances in financial circles, it is now quite clear that the burden thus laid upon the taxpayers would have been greater than they could bear. It must also be perfectly clear that even if this financial disturbance had not occurred, so great an increase in the immediate cost of schools would prevent that extension of the school system every year which is necessary to meet the demands of an increasing population. It is difficult even at present rates of expenditure to secure sufficient funds to erect the additional buildings and to pay the additional teachers needed to provide for an annual increase in the school population of 25,000 children. If, then, equalization of salaries cannot be attained by raising women's salaries to an equality with men's

salaries because of the enormous expense involved — an expense which would oppress the taxpayers and eventually cripple the system ; and if equalization by reducing men's salaries to the rates paid to women would result in driving men teachers out of the system, the inquiry at once arises : What advantage is there in retaining men as class teachers in elementary schools ?

In discussing this question, which is really a question of the relative merits of men and of women as teachers, I feel bound to say that it cannot be decided by any of the ordinary examination tests applied to determine the results of teaching. If the same examinations were given to twenty classes taught by twenty women teachers of average ability, and to twenty classes taught by twenty men teachers of average ability, in such a subject as arithmetic, or grammar, or geography, I am confident from my observation in the schools that the results in the women's classes would be quite as good as the results in the men's classes. The question, if determined at all, must be determined by considerations other than examination tests.

MEN AND WOMEN AS TEACHERS

It will be admitted, I presume, that the prime object of education is not so much the imparting of knowledge as the development of character. If this proposition is conceded, the question arises : Is the influence of men teachers through example and natural characteristics on the development of character the same as the influence of women teachers, or is it something different ? This question again must be determined in the light of the general intellectual and emotional characteristics of men and of women. That

the intellectual and emotional characteristics of men and of women are different is held by practically all students of psychology and sociology. What these differences are has been carefully examined and set forth by Mr. Herbert Spencer in his "Study of Sociology." The following passage contains his general conclusions : —

Admitting such to be changes which the future will probably see wrought out, we have meanwhile to bear in mind these traits of intellect and feeling which distinguish women, and to take note of them as factors in social phenomena — much more important factors than we commonly suppose. Considering them in the above order, we may note, first, that the love of the helpless, which in her maternal capacity woman displays in a more special form than man, inevitably affects all her thoughts and sentiments; and this being joined in her with a less-developed sentiment of abstract justice, she responds more readily when appeals to pity are made than when appeals are made to equity. . . .

The maternal instinct delights in yielding benefits apart from deserts, and being partially excited by whatever shows a feebleness that appeals for help (supposing antagonism has not been aroused) carries into social action this preference of generosity to justice, even more than men do. A further tendency having the same general direction, results from the aptitude which the feminine intellect has to dwell on the concrete and proximate rather than on the abstract and remote. The representative faculty in women deals quickly and clearly with the personal, the special, and the immediate ; but less readily grasps the general and the impersonal. A vivid imagination of simple direct consequences mostly shuts out from her mind the imagination of consequences that are complex and indirect. The respective behaviors of mothers and fathers to children sufficiently exemplify this difference, mothers thinking chiefly of present effects on the conduct of children, and regarding less the distant effects on their characters; while fathers often repress the promptings of their sympathies with a view to ultimate benefits. And this difference between their ways of estimating consequences, affecting their judgments on social affairs as on domestic affairs, makes women err still more than men do in seeking what seems an immediate public good without thought of distant public evils. Once more, we have in women the predominant awe of power and authority, swaying their ideas and sentiments about all institutions. This tends towards the strengthening of governments, political and ecclesiastical. Faith in whatever presents itself with imposing accompaniments, is, for the reason above assigned, especially strong in women. Doubt or criticism, or

calling-in-question of things that are established, is rare among them. Hence in public affairs their influence goes towards the maintenance of controlling agencies, and does not resist the extension of such agencies; rather, in pursuit of immediate promised benefits, it urges on that extension; since the concrete good in view excludes from their thoughts the remote evils of multiplied restraints. Reverencing power more than men do, women, by implication, respect freedom less — freedom, that is, not of the nominal kind, but of that real kind which consists in the ability of each to carry on his own life without hindrance from others, so long as he does not hinder them.

If Mr. Spencer's conclusions are just: if women respond more readily to appeals to pity and men to appeals to equity; if women are guided more by generosity and men by justice; if women's minds dwell more on what is concrete and proximate, and men's on what is abstract and remote; if women see more clearly the simple, direct consequences of an act, while men are prone to consider the complex and indirect consequences; if women realize public good that is immediate and men more clearly realize public ends that are remote; if women stand more in awe of power and authority while men are given to criticism; if women reverence power while men respect freedom, — it follows that children, girls as well as boys, should in their school work come under the influence of the mind of the man as well as of the mind of the woman. It is of the highest importance that each successive generation of men should, without losing the natural or acquired tendency to equity and justice, acquire more of the distinctively womanly characteristics of pity and generosity; and that women, without losing their insight into what is immediately beneficial and their reverence for power and authority, should acquire more of the distinctly manly characteristics of respect for freedom and insight into what is complex and remote. From the standpoint, therefore, of the develop-

ment of character in the pupil through that most powerful of all forces, imitation, it is necessary to have both men teachers and women teachers in the schools.

No better illustration of the effect of men's influence on boys' minds through imitation need be given than the activities conducted under the direction of the Public Schools Athletic League, in which tens of thousands of boys are daily practicing athletic sports under the leadership of a few hundred men teachers. This result, beneficial from the moral and intellectual as well as the physical point of view, would, if only women teachers had been employed to teach boys, have been impossible.

But this is not all. While the psychological argument derived from the characteristics of men and of women as set forth by Mr. Spencer is very strongly in favor of having men teachers in the schools, there is a social argument which is perhaps even stronger. A very large proportion of the children in our schools come from homes in which there is but little culture; in many of which the English language is rarely spoken, and spoken poorly; in many of which the husband and father is merely a breadwinner when he is not also a domestic tyrant. In such homes both boys and girls see little of the father and come to think of him in their daily life as one whose sole duty it is to toil, while he pays little, if any, attention to the graces and refinements of life. If, when they go to the public school, they find only women as teachers, the impression made upon their minds is sure to be that culture and refinement are for women alone and not at all for men. Such an impression could have only a prejudicial effect, particularly upon the minds of boys. Insensibly but inevitably they

would come to regard culture and refinement as things good enough perhaps for women folk, but unworthy of men, whom they conceive of as the toilers, the fighters, and the voters. If, however, they find in the public schools men teachers who, while possessing the characteristics of men of the world, have also acquired culture and refinement, boys naturally reach the conclusion that culture and refinement are worth while for men as well as for women. From this broad social point of view, therefore, it is certainly for the interest of the community and for the intellectual and moral elevation of the race that we should have men teachers in the schools as well as women teachers. Experience has doubtless shown that women teachers teach younger pupils, boys as well as girls, better than men. At that age, however, at which boys begin to extend their intellectual horizon beyond the circle of childish amusements, it is preëminently necessary that they should have an opportunity of acquiring through imitation the characteristics of men as well as the characteristics of women, of following the example of men of character as well as the example of women, and of seeing in men as well as in women illustrations of culture and refinement.

If the conclusion of the last paragraph, that the employment of men in the schools is necessary, is valid, it follows that the educational authorities must pay salaries to men sufficient to obtain the requisite supply of men teachers of ability and culture. If, however, it is not necessary to pay the same salaries in order to obtain a sufficient supply of women teachers of refinement and culture, it is difficult to see what reason can be advanced for increasing the educational expenses to the extent involved in equalizing the

salaries of women teachers with those at present paid to men.

For the sake of clearness the argument may be stated in a series of propositions:—

1. The majority of the class teachers in the public schools are women, for two reasons: (*a*) for the younger children who constitute the larger number in the schools, women make the better teachers; (*b*) the services of women teachers may be obtained more cheaply than those of men.

2. Some men teachers are and should be employed in the higher grades for three principal reasons: (*a*) that the pupils may come under the influence of the intellectual and moral qualities that particularly characterize men, as well as under the influence of the intellectual and moral qualities that particularly characterize women; (*b*) that the pupils may be made to feel that culture and refinement are not the peculiar province of women, but should also be striven for and possessed by men; (*c*) that the larger boys may have guidance and leadership in athletic sports.

3. In order to obtain the services of even a small number of men, it has been found necessary to pay considerably higher salaries than those paid to women.

4. Neither by any received economic theory nor by the analogy of any practice in any other walk of life, can it be regarded as sound policy to determine the salaries of the great majority (women) of the teaching force by the salaries paid to a comparatively few (men) who are employed, not because on the average they teach the ordinary school branches better than women do, but for special purposes.

If, then, the salaries which it is found necessary to pay in order to obtain the services of a few men, are not to

form the basis for the salaries of the majority of the teaching force who are women, what principles should determine teachers' salaries?

These principles seem to me to be two:—

1. A teacher's salary should constitute a living wage. In the case of a teacher a living wage ought to be understood to mean a salary sufficient to enable the teacher to live in respectable society and to take advantage of reasonable means of culture and recreation.

2. The salary should be such as to attract to the public schools of New York the best teaching talent in the country.

After the most careful consideration I have been able to give this subject, I feel convinced that the salaries now paid to the majority of our teachers violate both of these principles. The classes of teachers whose salaries specially require readjustment are the following:—

Women class teachers in elementary schools.

Women principals in elementary schools.

Special teachers of drawing and physical training in elementary schools, both men and women.

High school teachers, both men and women.

The initial salary for women teachers in elementary schools is \$600. An annual increase of \$40 is given until, in seventeen years, the maximum of \$1240 is reached, provided the teacher remains in any grade from the kindergarten to 6B. Considering the cost of living in New York City, I think it will be generally admitted that the salary of the first three years does not constitute a living wage in the sense in which I have defined the words. But this is not all. The Davis law provides three salary

schedules for women teachers in elementary schools. The results of this arrangement have not been good. The plan of having three different salaries for women class teachers in elementary schools has resulted in much bitter feeling on the part of teachers in higher schedules who are transferred from one school to another whenever, as is frequently necessary, a consolidation of classes is made; and it has operated to prevent principals from assigning their teachers to that work for which they are best fitted. I recommend, therefore, that as soon as money is available the initial salary for women teachers in elementary schools be made \$720 per annum, and that the same maximum salary, to be reached in a given number of years, be provided for all women class teachers. In further support of this recommendation, I feel constrained to say from my intimate acquaintance with the work of the Board of Examiners, that the salaries now paid to women teachers are not sufficient to attract to our schools the best women teachers in the country. Even in the case of our own high school graduates, many of the most talented go to college in the hope of entering upon some more lucrative walk of life rather than that of elementary teaching.

With regard to women principals, it must be quite clear to any one who is familiar with the work of the Board of Examiners that it is quite as difficult to obtain women principals of the requisite scholastic and professional attainments and executive ability as it is to obtain men principals. On this ground I recommend that as soon as money is available the salaries of women principals be equalized with those of men.

It is becoming increasingly difficult to obtain a sufficient

supply of supervising teachers of drawing and manual training and of physical training. The ablest members of the elementary corps of special teachers constantly find places in the high schools where the work is easier, less responsible, and better paid. Therefore, these salaries should be increased to attract a sufficient number of teachers of the right kind.

If our high schools are to maintain the high standard they have reached, it is absolutely necessary to pay higher salaries in order to obtain the best available teachers. I make this statement, not because there is any diminution in the number of high school teachers applying to the Board of Examiners for places on the high school eligible lists, but because after the lists have been prepared those who stand foremost very frequently, I might almost say, as a rule, decline appointment in New York City because of the inadequacy of the salary paid. First-class secondary teachers find that they can make more money by teaching in smaller cities, even when the salary is not so large, because living expenses are so much less. Not less than fifty of the ablest men and women whose names have been placed on the eligible lists for high schools have refused appointment in our city high schools during the past year.

I understand fully that owing to financial conditions in this city there is no immediate possibility of increasing teachers' salaries as I have recommended. In view, however, of the agitation of last year and in view of the urgent necessity for some action, as soon as practicable on the part of the financial authorities of the city and on the part of the Board of Education, I have judged it not inappro-

pritate to set forth some of the principles that ought to determine the adjustment of teachers' salaries with a view to increasing the efficiency of our schools.

PLANS FOR THE PAYMENT OF TEACHERS IN NEW YORK
CITY

(From the Greater New York Report for 1910)

There is at present, and there has been for four or five years, widespread discontent among the city's public school teachers with respect to their salaries. There are two main causes:—

First. An insistent agitation on the part of the women teachers for "equal pay for equal work."

Second. A consensus of opinion on the part both of the public and of the teachers that the lowest salaries paid are no longer sufficient in view of the increased cost of living.

The campaign for "equal pay for equal work," or, as the women teachers now prefer to put it, "payment for position," is so vigorous, so ably directed, and so persistent that it is increasingly apparent that in the end it will meet with some measure of success. The question at issue, therefore, is now, not whether the demands of the women teachers shall be granted, at least in part, but whether the form in which they shall be granted shall be so molded as to secure whatever advantages the new system promises, and at the same time to avoid whatever dangers it may portend.

Three plans have been suggested for paying teachers so as to allay the present discontent and to discourage agitation.

The first plan is to increase the wages of the women until they equal those of the men. As there are twelve times as many women teachers as there are men, the expense involved would be enormous. To equalize the salaries of women teachers with those of the men in the elementary schools would cost at least \$10,000,000 per year on the basis of the present number of teachers. The expense would be so great that it would effectually prevent the legitimate and necessary expansion of the school system.

The second plan is to reduce the salaries of the men teachers until they equal the present salaries of the women teachers. The result would be that the ablest of the men would leave the system, for they could easily secure higher salaries in other school systems or in other walks of life. Those who are charged with the management of the school system believe that the highest welfare of our children demands the presence of some men teachers in the classrooms. The fundamental grounds for this belief I stated with some degree of fullness in my Ninth Annual Report. It is not at all likely, therefore, that the elimination of men from the classrooms of the elementary schools will ever be permitted. Nevertheless, as there are only about one thousand men teachers in the elementary schools, and the plan of equalizing women's salaries upwards would cost about \$10,000,000 per year, it follows that to do so for the purpose of retaining the men would entail an added expense of \$10,000 per year for each man — an excessive price to pay.

The third plan is to base payment, not on the sex of the teacher, but on the sex of the pupils taught. This is the basis of the schedules recommended by the Commission on

Teachers' Salaries. While nominally providing for pay for position, it really preserves, though in a somewhat lessened degree, because of an increase in the salaries it is proposed to pay to teachers of girls' classes, the present disparity between the salaries of men teachers and those of women teachers. The women teachers have not been slow to see that this plan is a labored effort to "get round" their contentions, not to meet them squarely or to satisfy them, and have given voice to their belief in no uncertain tones. In addition to the fact that the Commission's plan would not satisfy the women teachers, allay discontent, and stop agitation, it is open to several grave objections. It would tend to increase the segregation of the pupils of the two sexes as distinguished from coeducation; it would artificially restrain the natural evolution of the school system because in every step taken to organize a school, those in authority would be obliged to consider whether any and every measure taken would increase the cost of teaching through the presence of boys or girls or both in a class; it would largely deprive the girl pupils of the advantages to be gained from being taught by men; and it holds out no incentive to earnest endeavor on the part of teachers toward improvement, and offers no reward for meritorious service.

However the question be finally solved — and solved it must be if the education of the city's children is not to suffer severely — I beg leave to submit that the following principles must be recognized in the solution:—

1. The plan of payment should be of such a character as to stimulate industry on the part of teachers, encourage individual improvement, and reward exceptional merit.

2. It should be of such a character as to permit the assignment of every teacher to that position or kind of work which he or she can do best. It should be possible to place a teacher over any class in a public school where his or her services are required, without regard to the salary paid. Under the present system and under the system proposed by the Commission, this flexibility is entirely wanting. A teacher cannot be transferred from a grade commanding a higher salary to a grade commanding a lower salary unless he or she is found guilty of general inefficiency, gross misconduct, insubordination, or neglect of duty—an intolerable situation.

3. It should permit organization of schools and classes in the most effective and economical manner without reducing the salary of any teacher or making necessary the transfer of teachers from one school to another. At present, if a teacher in the last two years of the elementary course is found to be unnecessary because of a shrinkage in the number of pupils in the upper grades, it is necessary to transfer her to another school and place her in a corresponding grade. This transfer is usually made greatly to the displeasure of the teacher transferred, and wholly to the displeasure of the teachers in the school to which she is transferred, one of whom is deprived of promotion. And displeasure begets discontent and irritation—a frame of mind in which no teacher can teach well.

If we bear in mind these three principles as essential to any scientific scheme of paying teachers, it will not be found impossible to formulate an effective working plan. A plan based on these principles will reimburse the city for any increased expenditure involved, because each increase in

salary will indicate and will involve an improvement in service.

Such a plan would be to pay all teachers according to a modified form of the Federal Civil Service system. Under this system teachers would be rated and paid as belonging to classes "A," "B," "C," etc. There would be no sex distinction in requirements or wages. From Class A (the lowest class) to Class B, all teachers should be promoted as soon as they receive their permanent licenses. From Class B to Class C they might advance on the vote of the Board of Superintendents as to fitness and merit. Above that point, however, a special commission would be necessary, whose members could devote their entire time to the work. This commission would control, under the direction of the Board of Education, the number and qualifications of persons admitted to each higher grade of salary. The assignment of teachers to classes, no matter how they were classified or under what grade of salary they were paid, should remain in the hands of the principals, subject only to approval by, and appeal to, the Board of Superintendents.

Such a commission might be composed of three or five members, among whom your supervising officers would be represented. The other members might be principals assigned to the special work of the commission for a period of three or five years, and receiving during that time an added salary of \$1000 a year over their regular salaries. One new member would be added each year and one old one returned to his regular place in the school system.

In my Ninth Annual Report I advocated the payment of the same salaries to women principals that are paid to men principals. I still hold to this view.

I submit this plan for your consideration and the consideration of the financial authorities of the city. I am confident that it will solve a problem which has hitherto appeared insoluble. While the schools would cost more than they do at present, the city would receive a full equivalent for the increased expenditure through the better service rendered by the teachers.

NOTE. — The plan of paying teachers adopted by the Board of Education in May, 1911, and afterward enacted into law was, in the case of high school teachers, founded on the plan proposed by Dr. Maxwell in his Report for 1910. Instead, however, of dividing teachers into classes as Dr. Maxwell proposed, and instead of an independent commission to determine the transition from one class to another, the Board of Examiners with the addition of a principal and a district superintendent are required to determine the possession of "superior merit" as a qualification for advance to the higher salaries.

—THE EDITORS.

XXV

THE BOARD OF EXAMINERS

During his superintendency in Brooklyn, Dr. Maxwell had almost annually advocated the necessity for getting competent teachers by examination. It was in no small measure due to his influence that provision for an examination board was put into the first charter for the Greater City. — THE EDITORS.

(From the Greater New York Report for 1907)

IN view of an attempt that has recently been made to secure, through the Charter Revision Commission, a reorganization of the Board of Examiners, it seems fitting to set forth in some detail the history, organization, and achievements of that body.

The Board of Examiners was established by the Charter of 1897. It has remained unchanged in the personnel of its members since 1898, when it was first organized. Its members were nominated by the City Superintendent from an eligible list prepared, after a most searching examination, by the Civil Service Commission. These members have since been twice reëlected, on the nomination of the City Superintendent, by the Board of Education. During these nine years they have passed upon the qualifications of thousands of teachers and made hundreds of eligible lists from which principals and teachers of all grades have been appointed. They have elevated the standard of scholarship and professional attainment required for entering the

teaching profession in this city. Not only so, but the conduct of their work has incited the teachers in the schools to an amount of professional study to improve their efficiency which a few years ago would have been thought impossible. Through the wise and impartial exercise of the powers conferred upon them by law, every improper extraneous influence has been absolutely eliminated from the licensing of teachers in this city. Owing to their efforts the public school system of New York City now presents the most perfect illustration of the principles of civil service reform to be found in America. So fully has the Board of Examiners justified its existence by its works, that many other cities have during the last four or five years established boards of examiners similarly organized and with similar powers. Among these cities are Newark, N.J.; Buffalo, N.Y.; Philadelphia, Pa.; Washington, D.C.; and Chicago, Ill. Under these conditions, the reasons should be very powerful that would induce the legislature to modify or overturn so great a power for good.

It has been proposed to "eliminate" the City Superintendent from the Board of Examiners. I presume this expression means two things: to deprive the City Superintendent of the right to nominate the members of the Board, and to remove him from its chairmanship.

Against taking the power of nomination from the City Superintendent it may be urged that that power is an added guarantee for permanence of tenure during good behavior for the members of the Board. The members of the Board are compelled in the discharge of their duties to do many things, such as refusing licenses to unworthy or ill-prepared applicants, which render them peculiarly liable to attack.

Hence they are constantly exposed to the misrepresentation, to the malice, and to the revenge, not merely of individuals, but of institutions which do poor work in the preparation of their students, and even of political and other societies whose favorites may happen to fail at examination. Their absolute independence is the supreme need of the school system. They should never be made to feel that their positions may be endangered by the performance of a plain duty. Their tenure of office should be such that they will be raised above the injurious efforts of malignity and revenge. To a measurable extent nomination for reappointment by the City Superintendent has given them this assurance, because the City Superintendent is most fully acquainted with their work, its trials, and its results. If any change be made in the law governing the Board of Examiners, it should be to make the tenure of the present members the same as that of principals and teachers — permanent during good behavior. The work of an examiner is comparable with that of a judge, and each should be safeguarded from injury while he does right, and should be held to a strict accountability if he does wrong.

It has been said that, owing to his power of nomination, the City Superintendent dominates the members of the Board of Examiners who simply register his will. When it is remembered that the Board of Examiners examines annually more than 12,000 persons for teachers' licenses, the absurdity of this statement is apparent. In the nature of things, with his other multifarious duties, the City Superintendent could not exercise the influence attributed to him. Apart from this, however, the statement is a gross libel upon both the City Superintendent and the other members

of the Board. He has never attempted to exercise any influence in the Board of Examiners other than that which flows from legitimate argument and discussion ; nor are the members of the Board the kind of men either to exhibit subserviency or to tolerate dictation.

As to the proposed removal of the City Superintendent from the chairmanship of the Board of Examiners, it may be claimed that his close connection with the Board has resulted in good in at least two ways : —

1. The City Superintendent, being in close touch with the work of the schools and with the other administrative officers, has been able to keep the Board of Examiners also in close touch with the schools. A Board of Examiners which was not in close touch with the schools, which constructed question papers that were too theoretical, or that led in directions opposed to the educational policy of the Board of Superintendents, would be a much less useful body than the Board of Examiners has been, and might even become a dangerous body. This is not an idle supposition. We have had just such an experience. From 1898 to 1902, the Board of Examiners had no official link with the Borough Boards of Superintendents which nominated teachers. It was to avoid the bickering and working at cross purposes which characterized school administration during those years that the City Superintendent was made by law the connecting link between the licensing authority and the administrative power. The harmony and good will which immediately resulted justify fully the continuance of this policy. The question papers of the Board of Examiners constitute not only effective tests, but standards of work, in harmony with the general policy of the school system.

Again, it is argued that the appointing power and the examining power should not be identical. The efficacy of this principle is more than doubtful. The position might be successfully defended that civil service examinations would be more searching, and better adapted to practical needs, if appointing officers had some voice in their construction. It is sufficient here, however, to point out that the City Superintendent is not part of the appointing power. The appointing power is lodged in the Board of Education.

Furthermore, the City Superintendent through his official position has been able to reënforce the work of the Board of Examiners by bringing to bear, when necessary, the expert knowledge of the District Superintendents and Directors of Special Branches. Their aid has not only enabled the Board of Examiners to get through an amount of work which otherwise would have been impossible except at enormous expense, but has added greatly to the value of the work, and has reacted most beneficially on the efficiency of all concerned. It is by this means, in no small degree, that the examinations for principals' and assistant principals' licenses have become real tests of teaching and supervisory power and standards of attainment. Were the City Superintendent removed from the Board of Examiners, such coöperation would inevitably cease.

For these reasons it is submitted that the Board of Examiners should remain as it was organized in 1898, except so far as to give its members permanent tenure of office during good behavior.

XXVI

"MERGING" OF ELIGIBLE LISTS

(From the Greater New York Report for 1911)

UNDER the interpretation given by the courts to the language of the charter it has been decided that it is the function of the City Superintendent to place the names of those to whom licenses have been granted on the appropriate eligible lists. Since 1902 the names have been placed on the eligible lists in the order of standing at examination without regard to the date of the examination or the date of the license. This practice is what is known in popular phrase as the "merging" of the eligible lists, because when a new examination is held, if any persons on the preëxistent list remain without appointment, their names are placed on the new list in accordance with their old standings. It thus happens that we invariably nominate and appoint those persons who have the highest examination standings. The assumption underlying this practice is that those who pass the examinations with the higher standings are the persons of larger intellectual ability and are therefore more likely to prove efficient teachers. This assumption I believe to be well founded. The tests applied by the Board of Examiners to applicants for license as grade teacher, for instance, are so thorough that they cannot fail to disclose ability on the one hand and weakness on the other hand. There is first an exami-

nation in the history and principles of education to discover whether the applicant is capable of holding and defending educational theory founded on logic, psychology, physiology, and the practice of the great teachers. Then comes an examination in English grammar and literature and methods of teaching English, as the most vital part of the elementary curriculum. This is supplemented by a rigid examination in methods of teaching the other "common branches," particularly arithmetic. Then come practical tests in the teaching of singing, sewing, physical training, and drawing. The most important part of the examination, however, is the oral examination in which the use of oral English, the power to read with accuracy and expression and to interpret perspicuously what is read, and personality, are determined. And finally, a careful search is made of the applicant's record as a student and a teacher to discover any reason why he or she should not succeed as a teacher. It goes almost without saying that the applicant who attains, as the combined result of all these tests, a final standing of 80 per cent is a person of more liberal culture and more powerful intellect, and therefore likely to be a better teacher, than a person who receives only 70 per cent, which has hitherto been the lowest passing mark for women. Knowing as I do the extreme care with which these examinations are conducted, I have no hesitation in taking the position, which is amply verified by after experience in actual teaching, that the higher the examination standing, the greater is the probability of success in the classroom. Such is the chief argument in favor of "merging" eligible lists. But it is far from being the only argument. What would happen in

case the list resulting from a new examination is not merged with the remains of the list resulting from preceding examinations? Why, inferior teachers (speaking relatively) would receive appointments before superior teachers are reached. The injustice of this practice to the children of the city is manifest. But this is not all. Because it has been known and promised that those who have the higher examination standings shall be appointed first, large numbers of the ablest young men and young women in our high schools have entered our training schools and colleges to prepare for the teaching profession because they knew that they would not be obliged to wait any great length of time for appointment. Did they know that they would be obliged to wait a long time for appointment, they would inevitably seek some other walk in life, and thus their abilities and accomplishments would be lost to the schools. In the same way many first-rate teachers from outside the city have taken our examinations because they knew that their own merits would secure immediate appointment. If, through failure to "merge" lists, this understanding is withdrawn, it is idle to expect that high class teachers of experience will participate in the competitive examinations in our city. The net results of abandoning the practice of "merging" lists would be twofold: (1) to appoint inferior teachers in preference to superior teachers; (2) to cut off the supply of superior teachers, both those from our own schools and teachers of experience elsewhere, and to confine our eligible lists to the names of inferior or mediocre teachers. Could a policy more blighting to the schools, more injurious to the children of the city, be followed than to deprive them of the ablest teachers attainable?

It is sometimes argued in the case of those whose names have stood for some time, say two or three years, on the eligible lists without appointment, that their experience as substitutes makes them the equals of those superior in ability and education. This is a very doubtful proposition, because experience in teaching may have, and often does have, the effect of accentuating defects rather than of improving skill. Many of the poorest teachers in our schools, as is well known, have had the longest experience. It is quality, not quantity, of experience that tells. Experience in teaching under careful and enlightened supervision makes for improvement in the apprentice teacher. Experience under negligent or ignorant supervision generally tends to deepen faults and confirm bad habits. The length of experience, therefore, unless we know the kind of experience and under what kind of supervision, counts for but little in determining the standing of a teacher. There is, however, some justice in this claim for a rating on experience obtained by substituting after the name has been placed on the eligible list, because there is always some presumption in favor of the augmentation of skill through exercise. Due weight may be given to such experience, not by exhausting the eligible lists in chronological order, but by re-rating periodically those who have had experience as substitutes. To do this equitably, however, some means must be devised (1) to give each teacher unemployed an equal chance with all others similarly situated to show her ability as a teacher; and (2) to have the teaching experience thus gained directed and valued by supervisors who may be held directly responsible for their direction and their judgments.

XXVII

THE GROWTH OF THE NEW YORK CITY SCHOOLS FROM 1900-1910

(From the Greater New York Report for 1910)

AS the decennial census of the United States has just been taken, it will not seem out of place to compare the growth of our school system with the growth of our city's population during the past ten years.

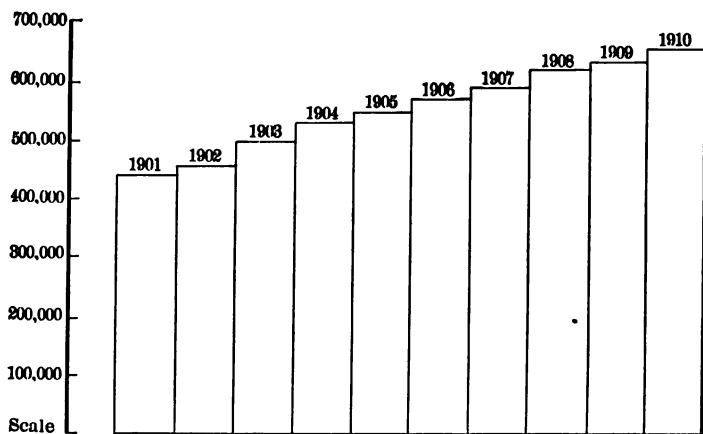
REGISTER AND ATTENDANCE IN ALL PUBLIC SCHOOLS FROM 1899-1900 TO 1909-1910

SCHOOL YEAR	AVERAGE REGISTER	AVERAGE ATTENDANCE
1899-1900	418,951	378,211
1900-1901	439,811	397,928
1901-1902	459,841	420,480
1902-1903	495,045	439,928
1903-1904	530,638	466,571
1904-1905	551,106	487,005
1905-1906	568,130	505,827
1906-1907	591,653	523,084
1907-1908	617,341	545,098
1908-1909	639,323	574,664
1909-1910	659,495	586,673

In the year 1900 the average register in all of the public day schools of New York City amounted to nearly

420,000. Ten years later it had grown until it almost reached 660,000. The growth during the decade was 240,000, or almost a quarter of a million. The actual figures showing both the average register and the average attendance for each school year from 1899-1900 to 1909-1910 are shown in the table on page 267.

The increase in the average register of 1910 over that of 1900 was 240,544, or 57 per cent. The average annual increase for each of the ten years was 24,054, and the average annual rate of increase 4.6 per cent. When the figures are reduced to graphic form, as in the following diagram, it is impressive to note the steady and rapid increase year by year in the number of children in our public schools.



Average register in all day schools in New York each year from 1901 to 1910 inclusive.

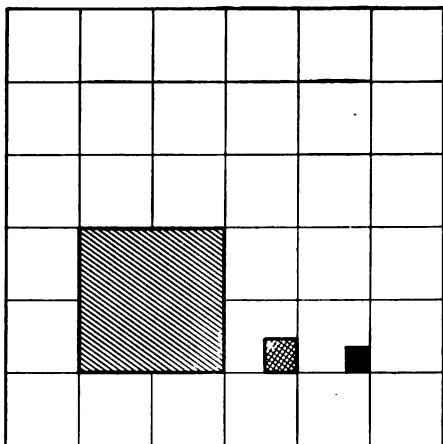
POPULATION INCREASE VS. SCHOOL INCREASE

In the year 1900 the population of New York City was less than three and a half million; ten years later it was

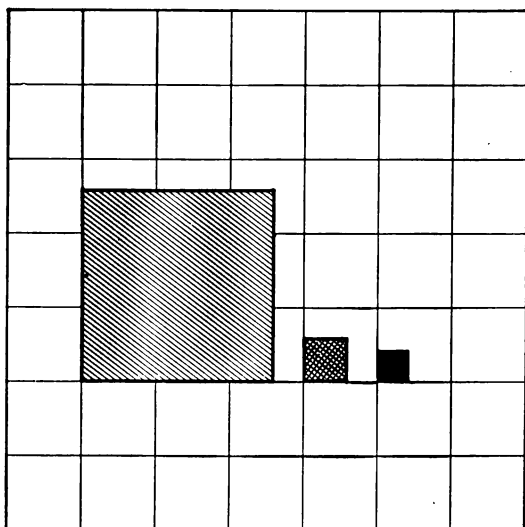
more than four and three quarter million, a gain during the decade of one and one third million. In exact figures, the population in 1900 was 3,437,202; ten years later it was 4,766,883, and the increase during this period was 1,329,681, or 39 per cent.

Now, since the city gained 39 per cent in population during the decade, and the schools gained 57 per cent in the same time, it is evident that the schools are growing much more rapidly than the city. A comparison of the two sets of figures shows that going to public school was the customary occupation of 12 people out of every 100 in New York's population in the year 1900, and that ten years later it was the customary occupation of 14 people out of every 100.

The figures show not only that the school system is taking each year a relatively more important place in the everyday life of the city, but that public education is already an interest engrossing the attention of more people than any other single set of interests in the municipality. According to the Federal census of 1900, the occupation employing the greatest number of individuals in New York was the inclusive one embracing servants and waiters, who at that time numbered 135,000. That is to say, these occupations included between two and three people in every hundred. The figures for the public schools show more than mere increase; they show that the business of education is the greatest, as it is the oldest, organized industry in New York City. How important it is, as well as something of the way it is growing, is shown in the two following diagrams, in which the large squares in outline represent the numbers of people in New York City at the



POPULATION OF NEW YORK CITY IN 1900 (100,000 TO THE SQUARE)



POPULATION OF NEW YORK CITY IN 1910 (100,000 TO THE SQUARE)
 ELEMENTARY PUPILS  HIGH SCHOOL PUPILS  TEACHERS 

beginning and the end of the decade, the interior squares with single diagonal crosshatching the number of pupils enrolled in the day elementary schools, the interior squares with double crosshatching the number of pupils enrolled in the high schools, and the interior squares in solid black the number of school teachers.

GROWTH OF THE DIFFERENT KINDS OF SCHOOLS

Not all kinds of schools have grown with equal rapidity. High schools have increased more rapidly than elementary schools and training schools more rapidly than high schools. Moreover, the teaching force has gained faster than the school system as a whole. Ten years ago, *three* people in each thousand of the city's population were enrolled in the high schools. Provision for secondary education has so increased during the decade that at the present time *six* people in every thousand are enrolled in the high schools.

If we include in the teaching force of the city, all of the regular and special teachers, principals, and supervising officers, and on this basis compare the teaching force with the number of pupils enrolled in all schools, we find that ten years ago there were forty-three children to each teacher; during the decade the number of teachers has increased until there are now only thirty-seven pupils for each teacher.

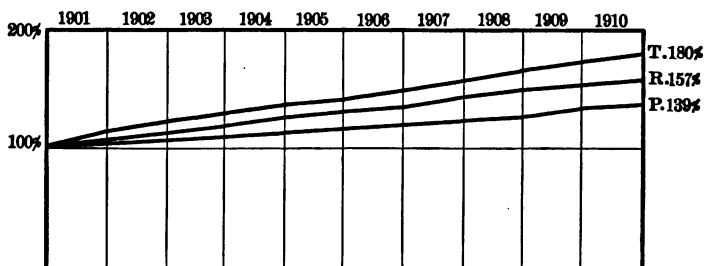
The exact figures showing the number of pupils registered in the elementary day schools, in the day high schools, and in the training schools, together with the teaching force of the city, for each year, are shown in the following table:—

AVERAGE REGISTER IN ELEMENTARY, HIGH, AND TRAINING SCHOOLS, AND TOTAL TEACHING AND SUPERVISING FORCE FROM 1900-1910, INCLUSIVE

SCHOOL YEAR	ELEMENTARY DAY SCHOOLS	DAY HIGH SCHOOLS	TRAINING SCHOOLS	TEACHING FORCE
1899-1900	407,245	11,706	*	9,839
1900-1901	426,353	13,458	475	10,735
1901-1902	444,045	15,185	611	12,069
1902-1903	477,369	17,065	611	12,696
1903-1904	512,570	19,330	758	13,327
1904-1905	529,437	20,770	899	13,777
1905-1906	545,420	21,493	1,217	14,548
1906-1907	567,259	22,931	1,463	15,613
1907-1908	590,364	25,264	1,713	16,489
1908-1909	606,568	30,762	1,993	17,073
1909-1910	622,048	35,107	2,169	17,724

* Figures not available.

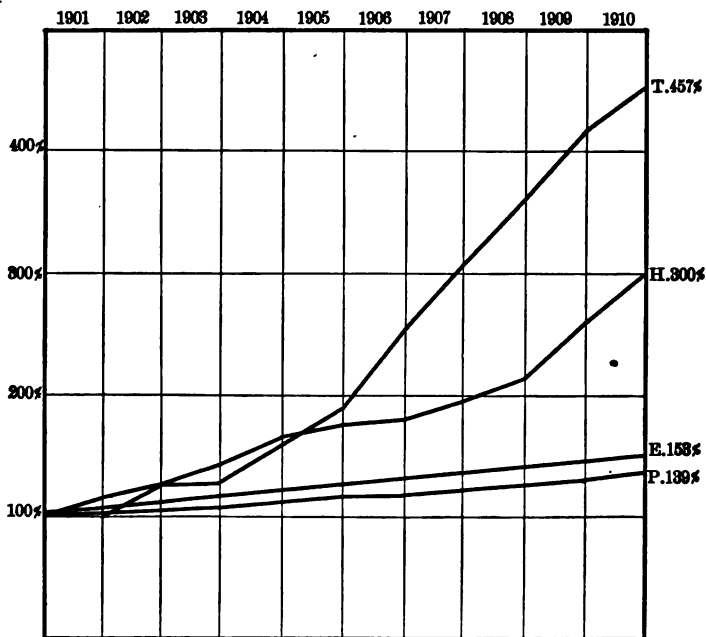
If we call the population of the city ten years ago 100 per cent, and in the same way call the registration in the elementary schools and the number of people in the teaching force 100 per cent at the same time, we can compute, and graphically illustrate, as in the following diagram, the



The lowest line shows that population (P) has increased 39 per cent during the decade; the middle line that registration in all schools (R) has increased 57 per cent; the upper line that the teaching force (T) has increased 80 per cent.

increases in terms of percentages which have taken place during the decade. The heavy lines show what increases have been made in population, school registration, and teaching force year by year, and how the last two have increased more rapidly than the population.

Following the same plan, we are enabled to compare the growth in the population of the city, registration in the elementary day schools, registration in the high schools, and registration in the training schools, all in terms of percentages.



The lowest line shows that population (P) has increased 39 per cent during the decade; the second line that registration in the elementary day schools (E) has increased 53 per cent; the third line that registration in high schools (H) has increased 200 per cent. The upper line shows that registration in training schools (T) has increased 357 per cent in nine years.

Here the differences in the rate of increase are even greater than those shown in the preceding diagrams. In terms of percentages, the increases for the decade and the average increase per year are as follows:—

PERCENTAGE INCREASE FROM 1900-1910

	INCREASE DURING DECADE	AVERAGE INCREASE EACH YEAR
Population of city	39%	3.3%
Elementary day schools	53%	4.3%
All day schools	57%	4.6%
Total teaching force	80%	6.1%
Day high schools	200%	11.7%
Training schools	357%	18.7%

When any given quantity increases through a series of years by a given percentage each year, its direction in its progress upward, when plotted on a diagram, is not a straight, but a curved line. That is to say, although the per cent of progress remains constant, there is each year a new base on which the percentage is computed, and hence the amount of gain is each year greater than it was the year before. If we plot such lines, showing the rate of increase in the city's population, teaching force, and each separate kind of school, we have a diagram with a series of curved lines showing the rate at which each separate item has been increasing during the past decade. These rates of increase are expressed in figures showing how many years it takes the population and each branch of the school system to double in size.

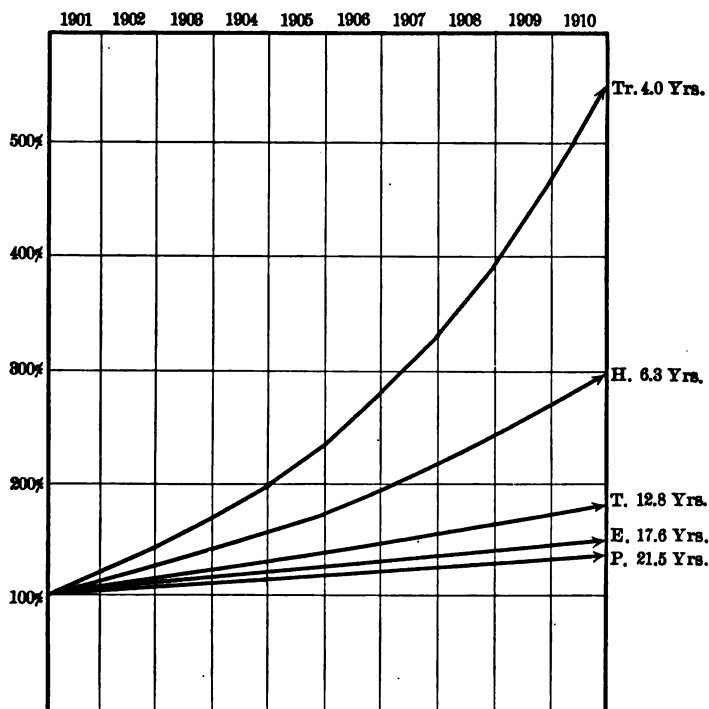


Diagram showing how the population and each branch of the school system are doubling in size according to the rate of development maintained during the past decade. Thus, at these rates population (P) doubles every 21.5 years; elementary schools (E) double every 17.6 years; teaching force (T) doubles every 12.8 years; high schools (H) double every 6.3 years; and the training schools (T) 'double every 4.0 years.

In round numbers, the rates of progress have been as follows :—

Population of city doubling in size every 21.5 years
 Elementary day schools doubling in size every 17.6 years
 Total teaching force doubling in size every 12.8 years
 Day high schools doubling in size every 6.3 years
 Training schools doubling in size every 4.04 years

It is evident that these rapid rates of increase cannot long continue, for should they do so, the city would soon be seriously oversupplied with schools. What they mean is that during the last decade our city has been making a determined and successful effort to catch up with her educational needs. Hereafter, it may be expected, growth will be less rapid. It will be necessary, not so much to supply deficiencies caused by lack of enterprise or lack of money in the past—that has been the gigantic task of the decade just closed—as to enhance the intrinsic value of public education. Our policy hereafter should be, while never neglecting necessary growth, to make not growth but efficiency our chief aim.

I submit, however, that, though excessive rapidity in growth is the chief foe of efficiency, the fact that the school attendance has increased so much more rapidly than population is conclusive evidence that the people appreciate the efforts that have been made, amidst unparalleled difficulties, to improve our schoolhouses, to elevate our standards of teaching, and to render the school life of our children more happy and more profitable.

XXVIII

CITY SCHOOL SYSTEMS

We understand that Dr. Maxwell's views have undergone some modifications, particularly with regard to the course of study and to the licensing and appointment of teachers since this paper was prepared. It is printed as it was delivered, however, because it lays down the broad lines along which educational administration has since advanced in the cities of the United States. — THE EDITORS.

(A paper read before the Department of Superintendence of the National Educational Association in New York, February, 1890)

WERE society perfect, there would be no need of public schools. When society becomes perfect, there will probably be no public schools. When in the progress of evolution men shall reach that condition in which the liberty of each individual shall be bounded only by the liberty of every other individual; when the human intellect shall attain such development that all men shall desire education for themselves and for their children, and, desiring it, shall know what is the best kind of education, and how best to obtain it; and when such a balance between egoistic and altruistic sentiments shall be established that the childless shall regard it as an injustice to pay for the education of other people's children, and those who have children shall equally regard it as injustice to receive assistance from those who have no children, — when all these things shall come to pass, then, and not till then, can public schools be dispensed with.

That this stage of civilization will not be reached in our time, may be safely asserted. Indeed, in the present age and in the existing stage of social evolution, it may be confidently maintained that education is one of the chief duties, if not the chief duty, of the government.

This country has passed through the militant stage. No longer is it necessary to expend the resources of the people on expensive armaments to defend the nation from the encroachments of foreign nations, or from the still more dreadful evils of fratricidal strife. We have reached that advanced industrial type in which the chief business of government is not either to be an aggressor or to ward off aggression, but to defend each citizen from the invasion of his rights by any other citizen. The development of the individual is now the great desideratum. It is an axiom of political ethics that a society is not more advanced in the scale of civilization than are the units of which it is composed. If individuals are ignorant and vicious, it matters not what are the laws and institutions, the society will be low in the scale of civilization. It follows, therefore, that the most important business of government in this advanced industrial type is the development, intellectual, moral, and physical, of the individual. In these facts lies the *raison d'être* of public education. The government that does not educate must either give place to a better government, or it will inevitably fall before a worse.

THE EVOLUTION OF SOCIETIES

So much may be inferred from the evolution of social and political institutions in the past. Two great forces have been at work — integration and differentiation. In

the initial stages we find small groups bound together by actual or supposed descent from a common ancestor. The necessities of attack and defense supply the motive for union. One primitive group unites with another primitive group, and the resultant group is compounded and recomposed with other groups, always under the pressure of aggression or repulse of an aggressor, until loose aggregations of savages, bound together by family ties, are formed into great nations, in which individuals are no longer bound together by consanguinity, either real or fictitious, but by the mutual dependence of citizens.

Hand in hand with this process of integration, but always dependent upon it, goes the process of differentiation. The chief, the superior few, and the inferior many, are early separated by broad lines of demarcation. The chief, the superior few, and the inferior many of the smaller groups develop into the king, the nobles, and the people of the larger aggregation. The contentions that arise among the three classes necessitate, in the presence of a common foe, the resignation of rights once claimed by the privileged classes, while the density of population and the increase of wealth consequent upon industrialism serve still further to weaken class distinctions. Social or tribal political assemblies become subordinate to a central political assembly. This body, which originally possessed legislative, political, and executive powers and functions, gradually throws off the judicial and executive powers, which become vested in separate bodies, and finally all political bodies become either directly or indirectly of representative origin.

The formula for the evolution of societies, thus briefly

and imperfectly summarized from Mr. Herbert Spencer, may be stated in these words: Societies which are small, loose, uniform, and vague in structure, develop into societies which are large, compact, multiform, and distinct in structure. To this may be added the further fact that each new differentiation of structure is accompanied by a specialization of function. Not only is this so in the three great branches of government, but it is so in all the agencies that serve for the protection and distribution of wealth, in all the agencies that lead to the moral, intellectual, and physical progress of the human race. In everything, differentiation of structure and specialization of function is the law of progress.

APPLICATION OF THE FORMULA OF EVOLUTION TO EDUCATIONAL ADMINISTRATION

This bald and meager statement of the evolution of societies is given, because it not only supplies the reason for the existence of public education, but also indicates the lines upon which any scheme of public education must be formulated, if it is to serve the purposes for which it is intended. If the most advanced type of political organization is that in which all governmental agencies, executive, legislative, or judicial, are directly or indirectly representative of the will of the people, the inference is inevitable that, to maintain such a system of government, the individuals of which society is composed must be adequately educated to the performance of this great trust. The functions of the American citizen, as Mr. James Bryce has pointed out in "The American Commonwealth," are far more complicated, delicate, and difficult than the corresponding functions of

the citizen of any European country. There, the duty of the citizen is confined to the choosing of legislators, who are left to settle issues of policy and select executive rulers. Here, on the other hand, the citizen is virtually one of the governors of the republic. The election of legislators is only a small part of his duties. By popular vote executive rulers are selected and all great issues are determined. The proper performance of these weighty duties assumes on the part of the citizen an amount of knowledge and an amount of intelligence not required in the European citizen. That this knowledge and this intelligence are still far from universal—in other words, that the public schools have only partially performed their functions—is only too certainly demonstrated by the existence everywhere of a class of professional politicians, a class that is to be found in both the great political parties, who exercise a real rule that too often renders the rule of the people only a name. Had the public schools succeeded in imparting the necessary information and developing the necessary intelligence in the people, the power of the professional politician either to nullify or to form the will of the people would have been much less than it is at present.

It is not true, of course, that all the evils the body politic is heir to, owe their existence to defects in the system of public education. Every educator knows that evil in the environment and hereditary propensity to wrongdoing are constant quantities against which he has to contend. They are powers of darkness that will, despite all his efforts, too often nullify the good effects of his work. But the question is: Which is gaining ground—the evil, or the good? This question I shall not undertake

to determine. It is enough for us to know that the professional politician is more firmly entrenched than ever. It is enough for us to know, that, in proportion to the increase in the urban population, insanity and crime increase. It is enough for us to know that the common enemies are not diminishing in strength, to cause us to look well to the joints of our armor, and to search in the ancient arsenals of history and philosophy for the weapons with which to combat the hosts of ignorance and evil.

He would be, indeed, a dull observer who did not see that educators have already commenced this search. Our higher institutions of learning are beginning to recognize the fact that the highest duty of a university is to teach the science of teaching. Superintendents, principals, and teachers are beginning to study the principles of education and to deduce their methods from the premises afforded by a rational psychology. The spirit of reform, the spirit of progress, has seized the ranks of the educational army. There is a ferment of thought, a striving after what is better, that bodes nothing but good to our country. All this is well—so far. But of what avail is enthusiasm in an army when proper organization is wanting? The raw recruits who ran away at Bull Run were every whit as brave as the men who withstood the desperate charges at Gettysburg. Organization, discipline, made the difference between the recruit and the veteran. Organization and discipline are as necessary to success in the educational field as in the military. Without scientific organization and proper discipline, wisdom and enthusiasm cannot accomplish their perfect work. The plans of wisdom

will be weakened by the wiles of the wicked, and enthusiasm will be dampened by the mists of ignorance.

What then should be the plan of organization? How is requisite discipline to be introduced? Organization can come only along the lines on which progress has been made in all social institutions — integration first, and then differentiation of structure and specialization of function. The surrender at Appomattox Court House rendered political integration complete. Differentiation of structure and specialization of function have proceeded so far on the political side that the legislative, judicial, and executive departments of government, both in the national and in the state governments, are now more clearly separated and more closely confined to their special functions than in any other country on the face of the earth. But how is it with the work of public education? Has it become in like proportion differentiated in structure and specialized in function? The law, as stated by Mr. Spencer, is: "Be it in an animal or be it in a society, the progress of organization is constantly shown by the multiplication of particular structures adapted to particular ends. Everywhere we see the law to be, that a part which originally served several purposes and achieved none of them well, becomes divided into parts each of which performs one of the purposes, and, acquiring specially adapted structures, performs it better." Do our state, do our city, public school systems, answer in structure and in function to the requirements of this law? Judged by the standard set up by the philosophy of history, our public school systems are yet in the stage of semibarbarism. The state has, in the management of city systems, practically abdicated its powers, and ignored its functions.

It confers upon municipalities, it is true, through charters, the power of maintaining and managing public schools; but it has established no authority to compel municipalities to administer educational affairs on the lines of scientific progress. It has established and it maintains normal schools, but it has not made normal schools effective by requiring that every teacher should have a professional education. It has enacted that it shall be compulsory upon every citizen to educate his children, but it has not provided adequate machinery to enforce the law, nor adequate penalties to punish its violation. The state, therefore, is not performing the functions which, legally and morally, it is bound to perform.

On the other hand, city boards of education, nay, even the trustees of country schools, have thrust upon them duties and functions which, in the nature of things, they are incapable of performing to the best advantage of the community. The board of education is made responsible not only for the management and disbursement of educational revenues, the selection and purchase of school sites, and the building of schoolhouses, but also for the making of the course of study, the selection of textbooks, and the appointment, and in many places the licensing, of teachers. Is this in accord with the law that "A part which originally served several purposes and achieved none of them well, becomes divided into parts each of which performs one of the purposes, and, acquiring specially adapted structures, performs it better"? Is it not evident that we are still in that primitive condition wherein one part of the organism — the board of education — serves several purposes and performs none of them well?

An objector may reply : Does not the board of education employ school officers, a superintendent, a clerk, principals of schools, and the like, to whom it commits in greater or less degree the duties with which it is legally charged ? Quite true ; but it is a principle of human nature that performance without responsibility is unequal to performance with responsibility. The functions of school officers are for the most part advisory. Their best efforts may be nullified by the caprice or ignorance of those who hold the reins of authority. Under such a system the strongest and wisest of men may well grow weary of well-doing, and, instead of leading the vanguard of progress, content himself with trying to avert the dangers that continually threaten our public schools. Under such a system, the strongest and wisest of educators may be pardoned if he degenerates into a not ignoble specimen of arrested development.

But while evolution points out to us the path of all true progress, it also admonishes us that real progress is of slow growth, and warns us not to destroy before we are ready to build up. There is no truth more certain or more universal than that, in every opinion that has obtained wide credence, even though it seems to be absolutely wrong, there is yet in the ultimate analysis something that is supremely right ; that in every institution, no matter how little differentiated in structure, there are yet the germs of all subordinate structures, whose full development is necessary to the performance of certain functions. And so it is with our educational system. In the first place, we have the fact that the system is either directly or indirectly representative of the people. This is in accord with what the evolution philosophy tells us is necessary to progress in the

most advanced industrial type of society. Again, in the existence of state boards of education and state superintendents, we find evidence of the fact that the state still preserves the semblance of control over the public schools, even though it has lost, or never possessed, or possesses only in a partial degree, the reality of such control.

And yet again, in the existence of superintendents, supervising principals, and other officers to whom boards of education delegate certain powers of supervision, and by whose advice they are guided to a greater or less degree in forming courses of study and in the appointment of teachers, we find the ground plan for a complete differentiation of structures, and a complete specialization of functions.

THE STATE AND CITY SCHOOL SYSTEMS

Let us consider first the relation of the state to city school systems. The maintenance of public schools is a duty that belongs to the several states. So much is to be inferred from the language of the fundamental law. As the care of education is not delegated by the National Constitution to the United States, nor prohibited by it to the states, it follows that this duty devolves upon the several states. What, then, is this duty? Evidently to take such measures as may be necessary to secure to every citizen such an education as will enable him to be self-supporting, and able intelligently to perform the duties of citizenship. "Why," ask the advocates of *laissez faire*, "should not education be left to the individual? Why should not education be placed in the same category as manufacturing, buying, and selling, and the other opera-

tions of life which by almost universal consent are now left to the judgment of the individual?" Because, to summarize the argument as stated by John Stuart Mill:—

1. The great mass of people are comparatively uncultivated, and the uncultivated cannot be competent judges of cultivation.

2. Those who most need cultivation are least capable of finding the way to it by their own lights.

3. By many people education is not desired; and where the end is not desired, the means will not be provided.

4. If the end should be, as it probably would, as in many communities we know it is, erroneously conceived, the means provided would not be suitable.

These are the reasons why the state is morally bound to exercise the legal prerogative of providing public education. But observe, the same arguments which require the state to provide for public education, require it, when it delegates its powers to a municipality, to take all the necessary measures to guard against the abuse of those powers. If we are right in holding that public schools must be established because the great mass of the people cannot yet be trusted spontaneously to provide the requisite means for the education of their children, surely it follows that these same people cannot be trusted with the absolute control of institutions established, not for local purposes merely, but for state purposes. The low average of development in the units of which society is composed, is alike the argument for the existence of public schools, and for the establishment of state supervision over such schools.

In the light of the law of evolution, that progress comes

through differentiation of structure and specialization of function, I shall now endeavor to determine the special functions which in an ideal system would be undertaken by the state on the one hand, and by local officers on the other hand.

A MINIMUM STATE COURSE OF STUDY

First of all, within certain limits the state should determine the course of study to be pursued in all its public schools. It should determine the minimum amount of knowledge necessary for citizenship. It should fix the subjects of study and their proper sequence, and it should fix the minimum amount of time per week to be devoted to each subject. It should do this, first, because the state, through its properly constituted authorities, can command, as a municipality cannot or will not, the services of the most scientific thinkers and most expert educators, to formulate a course of study.

Again, the experience of all other countries that have enacted compulsory education laws is, that in order to make the law effective it is necessary to establish a minimum of knowledge before acquiring which a child shall not be permitted to go to work. But where there is not a uniform course of study, a common standard cannot be established. The consequence is that our compulsory education laws are to a very great extent inoperative. Even when the power is conferred upon school officers to require all children to attend school a certain number of weeks each year, it is often obeyed in the letter and violated in the spirit. There is no uniform standard which all must attain; and consequently children by the thousands, who have attended the

prescribed time, are every year put to work before they acquire the minimum of knowledge which every citizen should possess.

Then, again, the establishment of a uniform and consistent course of study in all institutions of learning from the primary school to the university, will prevent that waste of time and energy which moving from one locality to another or from a lower school to a higher, now involves. Let the most ardent of "home rulers" consider the anomalies of our present system. A boy twelve years of age moves from New York to Brooklyn. He has completed fractions in arithmetic in the school he has just left. When he enters a Brooklyn school he must thresh over all the old arithmetic straw because, forsooth, he doesn't know the subject from the predicate of a sentence, or the difference between a preposition and an interjection. Or if he leaves a Brooklyn school and enters one of certain New York schools, he will find himself put back in a similar manner because he cannot handle a chisel without cutting his fingers, or cannot recite the names of all the bones in the human body. And who shall say what and how great losses may be entailed upon a child by the practical excision of even one short year from his school life? Or, again, to take the higher phases of educational work, how absurd it is that, as often happens, a boy should pass through a primary school, a grammar school, and a high school, and yet find himself denied admission to a university because he had not studied Greek, or had not performed a certain number of experiments in physics! The president of Princeton told us last summer in Brooklyn that one great need of the educational systems of this

country was proper articulation ; and I most heartily agree with him.

Our amorphous, disjointed system reminds me forcibly of a line of railroad upon which I had once occasion frequently to travel : one half of it was operated by one company, the other half by another. The two companies were at swords' points. If one train could possibly get away from the junction before the other arrived, it invariably did so, and the belated and disappointed passengers were left to spend the night as best they could. And so it is, at least in New York State, with educational affairs. The educational trains do not wait for one another. The students, nay, the whole people, are the sufferers. The remedy is for the state to step in and take control. Then there will be no question as to whether the university shall articulate down, or the public school shall articulate up.

To recapitulate, the three reasons for state control of the course of study are :—

1. That the uniform course of study would be a better course of study than the average of the many diverse courses of study now in existence.
2. That a uniform standard for compulsory-education purposes would be possible.
3. That all parts of the system would be consistent, and the loss of time and waste of energy, now everywhere apparent, would be obviated.

While the elementary part of such a state course of study should be obligatory in all school districts, the wisdom of leaving the higher parts to the option of the local authorities will be at once apparent.

QUALIFICATIONS OF TEACHERS

Another subject proper to state control is the regulation of the qualifications of teachers. This state, for example, has established and supports ten state normal schools; and there are besides several city training schools and teachers' classes in academies and union schools. Yet not 25 per cent of all the teachers in the public schools of the state have gone through a regular course of professional training. The state has provided the means to prepare teachers for their work; it has not required that those who enter the public educational service shall have any special qualifications in the way of training. The result is that normal schools, in this state at least, are rather academies than training schools; and that every year there is poured into our schools a mass of untrained teaching material that acts like a brake upon the wheels of educational progress. It may be objected: Do not you city superintendents subject all candidates for teachers' positions to severe examinations in scholarship, and is not this a sufficient test of qualification? True, I answer, we have our examinations; but these examinations, except to the ignorant, are not severe. The scholastic attainments of the great majority of the applicants for teachers' licenses—the licenses of the lowest grade, I mean—in all the cities with which I am acquainted, would not entitle their owners to matriculate in Yale or Harvard. "Why, then," it may be asked, "are not your examinations more severe?" Simply because it is absolutely necessary, in order to provide a sufficient number of class teachers, to issue a certain number of licenses each year; and, on the one hand, there

is no central authority to lay down a proper standard of qualifications, nor, on the other hand, is the position of class teacher made either so remunerative or so agreeable as to attract to the service large numbers of persons of a high grade of scholarship. And yet this is the most important consideration of all. As the teacher is, the class is. As the teachers are, the school is. While year after year thousands of persons, not of a high grade of scholarship, and with no knowledge of the scientific principles, methods, and history of education, are appointed as teachers in the public schools, can we expect to raise our schools to that plane which they ought to occupy, to make them that civilizing force which the necessities of our political system demand? The state will not allow a lawyer to practice on our property, nor a physician upon our bodies, nor even a dentist upon our teeth, unless he has successfully gone through a course of professional training. Should it exercise less care in the case of those who are to practice on the intellectual and moral faculties of its own citizens? Surely not. Surely if this subject were understood, if its tremendous importance were appreciated, all intelligent, conscientious men and women would stand shoulder to shoulder for this the greatest of all educational reforms.

THE LICENSING OF TEACHERS

Closely connected with this subject is the licensing of teachers. If the state is to prescribe the qualifications of teachers, it follows that licenses should be issued directly by the educational executive officer of the state, or indirectly by his representatives, who should be responsible to him, and to him alone, for the discharge of this great trust. Under

no circumstances should licenses be issued or examinations for licenses be conducted by persons who are not professional teachers. No local board of education should have power to control this branch of our work. It is wholly professional, and, in my judgment, belongs to the state superintendent of public instruction, or a duly authorized representative.

Another matter which the state should control is the compilation of educational statistics. Statistics may be used as a basis for the distribution of the state school fund, or for purposes of comparison, or as the basis of legislative action. In all three cases they are worth very little, unless collected in a uniform manner.

THE STATE EDUCATIONAL AUTHORITIES

The four lines of work in which, as I have indicated, all the cities of the state should be subject to a central educational power, are the laying out of a course of study, the determination of the qualifications of teachers, the licensing of teachers, and the compiling of educational statistics. What machinery will be necessary for the performance of these high and onerous duties? Here again we find the germ of what we want in existing systems. In nearly every state there is a state superintendent, and in most states a state board of education. The powers of the state superintendent should be greatly enlarged. The state board of education might be merely an advisory body, or it might be a legislative body, or it might be partly advisory and partly legislative; but in all cases it should consist exclusively, as it does in France, of professional educators. In it should be represented the faculties of all the leading colleges and

universities, the faculties of all the leading professional schools, and the school officers of cities and counties, in proportion to population. Would not such a board of education give us a course of study that would lead directly, to use Huxley's phrase, from the gutter to the university? Would it not determine the professional training of teachers in such a way as to make teaching really a profession? Would it not devise plans for the licensing of teachers such as those adopted in Germany, that would effectually shut out the ignorant and incompetent? With such a board of education at his back, what could not a clear-headed, energetic state superintendent accomplish?

LOCAL EDUCATIONAL AUTHORITIES

What would be left for the local authorities of cities? Much, and of the highest importance. The course of study would be formed; the qualifications of teachers would be determined; but there would remain the execution of this course of study, the selection of textbooks, the employment and payment of teachers, the discipline of the schools, the location and building of schoolhouses, and the thousand other matters of minor importance that belong to the management of city schools. In trying to determine how these functions shall be best performed, let us bear constantly in mind the two facts: First, that all progress depends upon differentiation of structure and specialization of function; and, second, that we are likely to find in existing systems the promise and potency of all forms of educational reform. Indeed, the machinery is everywhere ready to our hand. In some places it is better oiled, and works more expeditiously and more surely than in others, but in nearly all

places it is practically the same. In some places — and I am happy to say that my own city of Brooklyn is one of them — differentiation of structure and specialization of function have been carried much farther than in others; but in all we find great similarity in the ground plan of the system. Everywhere we find a board of education. It may be only a committee of the city council, as in Buffalo, but still it is a board of education. We find superintendents, with or without assistants, according to the sizes of cities. We find principals, with or without assistant overseers, according to the sizes of their schools. And lastly, we find class teachers. How shall the various functions be distributed among these officers? Upon what principle shall the division of functions be made? That principle, as I have already pointed out, is responsibility. For certain lines of work, boards of education should be responsible; for certain lines of work, professional educators should be responsible.

BOARDS OF EDUCATION

The board of education, be it large or small, be its members elected by popular vote or appointed by the mayor, with or without the approval of the city council, is still directly or indirectly the representative of the people of the vicinage in the management of the schools, and as such it has the disbursement of the school moneys, which come in large measure from local taxes. The board should select the sites for school buildings, and, either directly or through its agents, superintend the construction. It should purchase all supplies, either directly or through an agent. In these matters the attitude of scholastic officers should

be purely advisory, except in the case of textbooks. Text books being so intimate a part of the scholastic work, and so nearly allied to the course of study, the selection should rest absolutely with the scholastic officers. But after the selection has been made, all business transactions should be conducted by the board. The board, too, must employ all teachers. But then the question arises: What teachers? Who shall make the selection? Were the requisite machinery for determining the qualifications of teachers by the state authorities once set in motion, this would be a matter of much less consequence than it is at present; but as matters stand now it is one of the highest importance. Who shall make the nominations? Shall it be a ward or district board of trustees, or a local committee composed of one, two, or three members of the central board; shall it be a larger standing committee of the board, or shall the whole board both nominate and appoint, or shall the superintendent nominate, or shall the principal of each school nominate?

These, I believe, exhaust all the possible methods. The first four methods — nominations by district boards of trustees, or by the central board or its committees — though the most common, are clearly violations of the law of evolution. They are objectionable, first, because the men who compose such committees have not, in the majority of cases, the special knowledge necessary to decide upon the merits of candidates; and, second, because such bodies are apt to be susceptible to the various forms of political and social influence which it is the duty of every conscientious school officer to disregard, and if necessary to fight at all hazards.

THE APPOINTMENT OF TEACHERS

Should nominations, then, be made by the superintendent? I answer emphatically, no. In the first place, no one man can have the necessary knowledge of all the members of the vast army of teachers employed in the public schools of one of our large cities, to regulate appointments and promotions according to the merits of the appointees, and for the best interests of the service. In the second place, the city superintendent grants, or ought to grant, licenses to teach, and the officer who performs this duty should be freed from all entangling alliances. As said our honorable President in his last annual report: "It would seem opposed to wise policy to confer upon the same persons the power both to certify teachers and to employ them. The opportunities for favoritism are so great that only the strongest men will refrain from helping their personal friends, or the favorites of their friends, to positions in the schools, with little regard to their fitness for the trust." Is, then, the principal of a school the proper person to intrust with this power? In my judgment, yes. He has, or should have, a more intimate knowledge of the requirements of his school than any other person. He should be responsible for his school, from the lowest class to the highest. How can he be held responsible when he has no voice in the selection of his subordinates; when, contrary to his protest, incompetent teachers may be retained in his classes? Responsibility is the quantity that determines the lines along which differentiation should proceed. All financial and business affairs are given over to the board of education, because the board is directly

responsible to the people, or to the people's representatives, for the expenditure of the people's money; and, in like manner, the principal, being responsible to the state, or to the state's representatives, for the education given in his school, should have large powers in the matter of the selection of teachers. The superintendent should share these powers only so far as to have a veto in the case of an appointment of an incompetent teacher, and to have the power of nominating, when it is advisable to transfer a teacher from one school to another; and the board of education should share them only as far as confirmation is concerned. Confirmation by the board of education, which of course implies the power of rejection, would be a necessary check upon the principal's power, and would cause him to feel a keen sense of his high responsibility.

THE REMOVAL OF TEACHERS

Closely connected with the subject of appointment is the question of removal of teachers. If admission to the teacher's profession were regulated on proper principles by the state, it would follow that the power of arbitrary removal would no longer remain with the local authorities — either school officers, or a board of education. Here I think we would do well to borrow from the Prussian school system. "Although," says President Adams of Cornell in describing the Prussian school law, "although the proper authorities of a district may select, from those having the requisite acquirements, a teacher for their school, when he has once been installed they cannot remove him. Such removal can be brought about only by the provincial

board. The object of this provision is easily seen. The government says: The teacher has made a long study of pedagogy, and he has greater ability to judge of the art of teaching and managing scholars than those can have who have had no such training. We will no more allow the people of a district on their whim to turn out a teacher whom we have educated, than we will allow a military company to turn out a captain. If it can be made to appear that there are good reasons why he should be turned out, those reasons must be presented to the provincial board, since they are so far removed as to be free from prejudice." How different from this ideal system is that which obtains in the state of New York! In his annual report, Superintendent Draper shows that out of 10,644 rural districts reporting, "More than half of them had a teacher who had not taught in the same district a preceding term. More than 75 per cent had not been a year in their present situations." Doubtless, if statistics were collected for the cities of the state, they would make a better showing than the rural districts; but it may be set down as a settled principle—the outgrowth of abundant experience in this and all other countries—that permanency of tenure on the part of teachers is one of the primary conditions of having good schools. It is not, however, permanency of tenure for inefficient teachers that we want, but permanency of tenure for those whose qualifications have been tried by competent authority; and, as I have already pointed out, that authority should be vested in a body of professional teachers clothed with powers derived, not from a county or a municipality, but directly from the state itself.

QUALIFICATIONS AND APPOINTMENT OF EDUCATIONAL OFFICERS

There are certain corollaries which, I think, flow logically from the premises I have laid down. If the state, through its educational officers, is to make the course of study for all public schools within its borders ; if the state, through its educational officers, is to determine the qualifications of teachers and to license all teachers ; if teachers should be appointed by the boards of education, upon the nomination of principals, subject to confirmation by the board of education—if these things are granted, the following corollaries must be accepted :—

1. The office of state superintendent must cease to be a political office.
2. The city superintendent should, in all the educational matters of the municipality, directly represent the state.
3. As the representative of the state, his qualifications should be determined and his license should be issued by the central educational authority.
4. He should be appointed by the municipal educational authorities only upon the nomination of the state educational authorities.
5. He should be appointed either for a long term of years, as are the judges of the supreme court, or should be appointed for life, and should be removable only by the state board of education, on complaint of a municipal or county board.
6. Principals of schools who are to be responsible on the one hand to the municipal board for getting the best possible results from the expenditure of the people's money,

and to the local superintendent for the execution of the state course of study, and to both for the nomination of subordinate teachers, should be appointed by the municipal board on the nomination of the superintendent, either for life or a long term of years; and should be removable by the state board upon complaint either of the municipal board or of the superintendent.

There are other questions which might, perhaps, be regarded as coming within the scope of this paper. Such questions are: Whether public schools should have many or few classes; whether promotions of pupils should be made once a year or twice a year; whether promotions should be made upon the results of examination, or of teachers' estimates; whether each school should receive pupils only from a limited district, or from any part of a municipality; what should be the particular duties of superintendents and principals in the matter of training teachers and in the general government of the schools? But these questions I have not the time to consider; and if I had the time, I have not the inclination. They are questions that have been discussed time and again before this department, by men abler and more experienced than I — men from whom I would gladly learn — men whom it would be presumption in me to attempt to instruct. They are questions, moreover, whose solution will probably never come in any final form until uniform organization shall have been attained.

Uniform organization can come only through the resumption on the part of the state of that control over educational administration in cities as well as in country districts, which will provide a uniform course of study,

which will prevent the employment of incompetent teachers, and which to the efficient will secure permanency of employment and freedom from all forms of persecution. As differentiation of structure and specialization of function in political societies lead directly to the greatest legitimate liberty on the part of the citizen, so will differentiation of structure and specialization of function lead to the greatest legitimate liberty for the teacher in his own peculiar province; liberty to pursue his calling, to perform his professional work, with an eye single to the interests of his pupils.

THE REALIZATION OF AN IDEAL

"The State," says Sir William Hamilton, "may wisely establish, protect, and regulate; but unless it continue a watchful inspection, the protected establishment will soon degenerate into a public nuisance — a monopoly for merely private advantage." What I would plead for is that inspection and supervision by the state which will effectually prevent our great public school system being used for merely private advantage, whether political or religious. That it may be used, that in some places it is used, "for merely private advantage," there is only too good reason to believe. And whenever this has come to pass, the efficiency of our schools is impaired in two ways: first, by diminishing the power of the teacher for good; second, by preventing many men and women of independent character from entering the profession, because they will not stoop to practice the fawning that leads to thrift. The position the teacher — even the humblest — ought to occupy may not unfitly be symbolized in the beautiful lines: —

As some tall cliff that lifts its awful form,
 Swells from the vale, and midway leaves the storm,
 Tho' round its breast the rolling clouds are spread,
 Eternal sunshine settles on its head.

The storms of political strife may seethe around him, the clouds of social crime may envelop him, but he should be a soul that, ever mingling with and ever fighting the obscene tumult, is never by it contaminated. The state has no higher duty than to create the conditions under which this ideal may be realized. Can this ideal ever be realized? Perhaps not, in our time. But it is a duty we owe to society, it is a duty we owe to ourselves, to grasp the ideal firmly, and to bend all our energies to its attainment. The history of evolution shows that all true reforms come slowly. Oftentimes it happens that what seems wholly evil lays the foundation for what is good. War and pestilence, cruelty and oppression, have all had their parts to play in the economy that has evolved civilization out of barbarism. The trials to which public education has been subjected are doubtless the means by which the system will be molded to better and nobler things. Oftentimes we may seem to retrograde when we are only gathering strength for another great advance. The wheels of progress can no more stop than the earth can stand still.

"Swing on, old pendulum of the earth,
 Forever and forever,
 Keeping the time of suns and stars—
 The march that endeth never!
 Long as you swing, shall earth be glad,
 And men be partly good and bad;
 Long as you swing, shall wrong come right,
 As sure as morning follows night;
 The days go wrong; the ages never.
 Swing on, old pendulum, swing forever!"

XXIX

CHARTER PROVISIONS AS RELATED TO THE ORGANIZATION OF SCHOOL SYSTEMS

(A paper read before the Department of Superintendence of the National Educational Association, at Milwaukee, Wis., February, 1905)

IN any consideration of the regulations that ought to be inserted in a city charter with regard to the public school system to be conducted for the people resident within the city's borders, the fundamental principle to be borne in mind is that the state, and not the city, is primarily responsible for public education. In all the duties imposed on the city regarding education, whether they pertain to the physical side, as in the building and maintenance of school houses, or to the intellectual and moral side, as in teaching and supervision, the city acts only as the agent of the state. The members of the board of education, whether they are elected by the people or appointed by the mayor, and the executive officers of the board, such as the superintendent of schools and the superintendent of buildings, are primarily state officers and only secondarily city officers.

Like all other social and political distinctions, this principle has its roots in a remote antiquity. Among the laws attributed to Solon in Athens is one enjoining on parents to have their children instructed in music and gymnastics, and providing also that no son was bound to support his

father in old age if the father had neglected to have the son instructed in a trade at which he could earn his living. In Sparta the state charged itself with the entire education of all male children after six years of age. Plato, and more particularly Aristotle, made education one of the chief functions of government. Every European country has now its ministry of public instruction, charged with the duty of providing and enforcing popular education. A long series of decisions in the courts in several of our states has enunciated and confirmed the principle. The most recent, and perhaps the strongest, of these decisions was rendered only a year ago by the Court of Appeals of New York. In expressing the unanimous judgment of the court, Judge O'Brien wrote as follows:—

We have seen that the policy of this state for more than half a century has been to separate public education from all other municipal functions, and intrust it to independent corporate agencies of its own creation, such as school districts and boards of education, with capacity to sue and be sued in all matters involved in the exercise of their corporate powers.

This view of the law is in accord with the fitness of things. No agency less extensive and less powerful than the state has the necessary authority and the necessary resources to provide and to enforce universal education. All history shows that, when education is not provided and enforced under the authority of the law, it is poorly provided and never enforced.

It would scarcely be worth while to occupy your time and attention with this principle, were it not that there is constant necessity to restate the fundamental truths on which our institutions are constructed. In the storm and stress of modern life, in the emulation among individuals

and communities, the respective rights and duties of the state and of local authorities are either forgotten or mingled in inextricable confusion. Such is the condition of thought to-day in many places with regard to the attitude of the state, on the one side, and of local authorities, on the other side, toward public education. The time was in the older states when the local community was entirely willing that the state should do as it pleased regarding education, as long as the local taxpayer was not called upon to pay the bills. A striking example of this disposition was the attitude of the Free School Society of New York City, which came into being just a century ago. That society proposed to found schools for poor children that were not under instruction in the schools of any religious sect, and to support them by voluntary contributions with such aid as might from time to time be obtained by grants from the state. In his address delivered at the opening of the society's first school building in 1809, De Witt Clinton, great statesman though he was, argued against local taxation for the support of public schools on the ground that such taxation would set the people against education. Having instanced the tax for free schools in Pennsylvania, he went on to say: "The people of Pennsylvania are therefore interested against a faithful execution of the plan, because the less that is applied to education, the less they will have to pay in taxation." How false this view is, the history of public schools testifies. As the school tax has increased, instead of becoming interested against public schools, the people have become interested in and for public schools. And this sentiment is altogether natural. People are always interested in what they are paying for, and particu-

larly when the object of their disbursements is so near to them as the education of their own children. Such an opinion as that expressed by De Witt Clinton is possible only where free schools are regarded as charity schools — schools for those who cannot afford to pay for the tuition of their children. With the advent of a broader view of the objects and possibilities of public education, such opinions tend to disappear. When men begin to understand — and the generality of men do not yet fully understand — that public schools are the people's schools, that they are for all, rich and poor alike ; when they realize that one of the prime objects of public education is to provide, as far as public education can provide, equal opportunities for all ; and when they bring home to themselves the profound truth that democratic institutions will remain democratic only on condition that the people remain enlightened, — then will they take a keen interest in their own schools. But in every community there are those who realize these things only in part ; in every community there are forces that would use the schools for wrong or selfish purposes.

These persons may perhaps be divided into two classes : first, those whose opinions have not advanced beyond the views of De Witt Clinton and his friends who founded the Free School Society of New York, and who argue that, as free public schools should be only for the children of the poor, their work should be confined to the rudiments of an English education — the three R's, so to speak ; second, those who believe, though they proclaim their faith by their acts rather than by their words, that the position of teacher, principal, or superintendent, is one of the spoils of office, and

should go to whoever has the requisite political influence to obtain it. The complete triumph of either class would set education in any community back at least a generation.

When the community is unable or unwilling to protect itself and its public schools against these evil influences, it has a right to the protection of the state, exercised through the state's proper officers. In view of the duties to be performed and the dangers to be avoided, the functions of the state regarding education may be regarded as threefold : —

First, either to provide education for all, or to require that suitable education be provided by each community.

Second, to provide, or to require the community to provide, the means of enforcing education upon all children ; because the man who fails to give his children education commits a twofold crime—a crime against his children, whom he deprives of much of the happiness and success of life, and a crime against society, whose strength and prosperity are diminished by the ignorance of any of its members.

Third, to provide such laws and such machinery as will protect the schools against the attacks either of foolish doctrinaires or of unscrupulous politicians.

There is one great danger, however, in the exercise of the state's educational functions ; namely, that, if too much dependence be placed upon the state, local spontaneity and local effort may be discouraged. The best means hitherto found to enable the state to reënforce, without discouraging local authorities, is the enactment, by its legislative branch, of laws laying down minimum requirements, and the making of regulations by its educational

officers which have the force of law. These laws may either be general enactments, or they may be embodied in city charters. They should embrace at least the following provisions :—

1. The limits of age within which all children must go to school.
2. The minimum extent of school buildings which each community must provide in order to accommodate its school population.
3. The minimum amount of time to be spent in academic studies and professional training by candidates for teachers' licenses.
4. The establishment of institutions in which such training may be given.
5. A method of appointing teachers that shall eliminate political, social, and every other consideration, except that of merit.
6. A sure and certain means of raising revenue that shall increase as population increases.
7. A minimum salary for teachers that shall be in some degree commensurate with their training and with the social position they ought to occupy.
8. Pensions for old age after physical and mental disqualification.

It should be made by law the duty of the state's educational executive officer—call him state superintendent, commissioner of education, or what you will—to see that such laws are enforced by local authorities, and to determine, always with the aid of a council of educators, minimum courses of study for all grades of public schools—elementary schools, high schools, and training schools. It follows that he should be clothed with ample authority to carry the laws into effect and to enforce his own ordinances.

The community or the municipality should always have the authority to go as far beyond the minimum requirements of the state as the people, or their representatives in a board of education, may determine. In this way the schools have the protection of the state, while local enterprise is encouraged. In proof of this statement I cite the

experience of New York. In 1895 that state enacted a law laying down the minimum amount of time to be spent in academic and professional training by candidates for teachers' licenses in cities, and authorizing the state superintendent to lay down minimum courses of study for the institutions in which such training is given. There is not a city in the state that has not made requirements exceeding the minimum requirements both in duration and in extent.

It has fallen to my lot in this discussion to set forth the reasons why the state should prescribe minimum requirements with regard to the training and appointment of teachers in cities. For the present I shall confine myself to the training and appointment of teachers in elementary schools. I shall assume in this presence that there is no difference of opinion as to what should be the minimum amount of time a teacher in elementary schools should devote to training. The academic training should be not less than four years of high school or secondary school work, which should include English, mathematics (at least algebra and plane geometry), a foreign language, history, biology, physics, drawing, music, and gymnastics. All of these subjects are required to develop and strengthen the powers of the mind, and to provide the foundation upon which professional training may afterward be built. The minimum amount of time to be devoted to professional training should be two years.

The specific question, however, arises: Should a city of considerable size — one, say, that requires a hundred or more new teachers each year — be required by law to maintain a training or normal school for teachers? This

question should be answered in the affirmative for the following reasons :—

1. While it is highly desirable that a considerable proportion — say, one fourth, or one third — of the new teachers appointed in a city school system each year should come from outside the system, yet experience has shown that in all our large cities the majority of the teachers are and must be drawn from the system itself. Local sentiment enforces this policy ; necessity compels it. In any one of our rapidly growing cities it is simply impossible to obtain a sufficient number of teachers from outside to fill vacancies, and to teach the new classes which it is necessary to form each year in order to meet the increase in population. It follows, therefore, that each large city must train the greater part of its own teachers.

2. The pressure from politicians, on the one hand, to have the sons and daughters of their friends, or of those whom they desire to favor, appointed teachers, is a constant force with which we must reckon. The pressure of parents, on the other hand, to secure teacherships for their children, particularly the daughters, at the earliest possible age, is also a constant and even stronger force. These two forces acting together are ever tending to lower, or even to break down, the barriers which local educational authorities set up to exclude untrained teachers from the schools. So powerful are these forces that a city training school is in constant danger of being emasculated, if not overthrown, by their corrosive strength. It should, therefore, as a necessary condition of good schools, be established and protected by law.

3. In a large city a training school for teachers is neces-

sary to maintain educational standards. In a city school system, owing to the rapid multiplication of schools and teachers, there is a constant tendency to sag, to lower the standard of results. If any one doubts this statement, he has only to reflect for a moment on what must be the effect of bringing a large number of inexperienced teachers—in New York it is over one thousand—each year into the schools. Of the measures that may be adopted to neutralize the demoralizing effects of too rapid growth, a training school for teachers—particularly if it embrace, as it should, a model school—is probably the most effective. Here will be a school which is always manned by teachers of experience and of the largest ability; a school which is never weakened by an influx of inexperienced teachers. Such a school is a model, a standard, a tonic for all the other schools of the system. Its establishment and maintenance under the authority of law is, therefore, demanded as one of the protective measures which the state is called upon to enact for the preservation and uplifting of its public schools.

4. City training schools are necessary, because, if I may judge from my own experience, there are very few institutions other than city training schools, which provide the specific training that teachers in large cities require. Under the conditions of life in our large cities, the schools must supply, as far as schools may, the training which in the country is obtained by work in the home or on the farm. The country boy who does chores about the house or on the farm before and after school, who cuts firewood, or brings in water, or tends the cattle, or helps to train a colt, or who plants seeds and protects the seedlings from birds and weeds, is acquiring a knowledge, and receiving a training in the use of his

hands and eyes, in judgment, in carefulness, and in executive power, which is denied to the city boy. If the crowded populations of our great cities are not to degenerate physically and mentally, the city teachers must be trained to supply in some measure the deficiency. It is not enough that a city teacher should be able to teach language and grammar and penmanship and arithmetic and geography and history and drawing. She must be a trained observer, in order to detect and to treat properly the idiosyncrasies of children brought up under peculiar and always artificial conditions; she must be an athlete, to teach gymnastics and lead in children's games; she must be a mechanic, to give boys the use of their hands through exercises in wood and metal; and she must be expert with scissors and needle, to teach girls to sew and to make their own dresses. It is chiefly in the large cities that all these qualifications are demanded. As far as my experience goes, the city training school is almost the only institution that is turning out teachers adapted to the city's needs. The lectures of the university professor of pedagogy on the principles and history of education are admirable in their stimulating, knowledge-giving, and view-enlarging effects for teachers of experience; but they constitute a poor preparation for the young teacher, full though his head may be with theory, when he suddenly finds himself confronted with fifty unruly urchins, who perceive their teacher's defects and limitations much more quickly than he does himself. The state normal schools, with some exceptions, have not adapted themselves to city conditions. For the most part they are still secondary schools, with a little professional training thrown in. They have not yet risen to the height of the great

argument that teaching is a profession, and requires a peculiar institution in which its intending professors shall devote their whole time and thought and energy to learning the science and acquiring the art of teaching. For the present at least, therefore, we must depend upon city training schools to develop the peculiar type of teacher which the conditions of life in our large cities demand.

For purposes both of minimum requirement and of protection, city training schools should be established under the authority of law.

We may now pass to the second part of the subject — the licensing and appointing of teachers. The theses which I lay down may be stated as follows: —

1. All licenses should be probationary, and should be made permanent only after the ability to teach well has been demonstrated and the habit of skillful teaching has been acquired.

2. Teachers should be nominated and appointed and promoted by an expert, or a body of experts, as nearly as possible in the order of standing from eligible lists prepared as the result of examination by an independent board of expert examiners.

The first thesis — that teachers' licenses should be temporary and revocable until success has been demonstrated — is so obviously in the interest of the schools and the people, and, indeed, is now so generally adopted, that I shall not consume time in stating the arguments in its support.

Nor is it necessary to discuss at length the proposition that teachers should be appointed and promoted, not by laymen, but by experts in teaching and school management. If the principle of appointment in order of standing from an eligible list is accepted, the principle of assignment to duty by experts follows as a matter of course. Appointment, then, means assignment to position; and surely, if

any part of the procedure requires expert knowledge, the placing of each teacher at that kind of work which she can do best, is that part.

The real crux is: Should appointments be made in the order of standing from eligible lists prepared as the result of competitive examination? To make appointments of teachers in this way is to apply to the teaching profession the principle of civil service reform which has now been introduced with comparative success into other branches of the public service, municipal, state, and federal. Such a system is undeniably better than the system it supplanted. Said George William Curtis, before this department fourteen years ago, —

Whatever foolish questions may be asked, whatever possible frauds practiced in an examination, they are wholly insignificant when compared with the unspeakable folly and the certain fraud of appointment by patronage, or mere personal and partisan favor.

Having closely watched appointment of teachers by personal and partisan favor for nearly twenty years, and having participated both in examination and appointment under the merit system for nearly six years, I am fully prepared to say that the merit system is as far superior to the personal system in the appointment of teachers as Mr. Curtis found it in other branches of the public service. What are the objections that are argued against the merit system? It is said that an examination cannot determine fitness for classroom duty. Were examination the exclusive test, there might be some force in the objection; but it is not: probation is a vital condition of the merit system. Examinations, however, may be so conducted as to determine fitness very closely, certainly to exclude the grossly

unfit. Every well-conducted examination consists of two parts—a written and an oral. A well-ordered written examination is an almost infallible test whether an examinee has the ability to marshal his resources at a sudden call, whether he can think clearly and coherently, whether he has an adequate mastery of written discourse, and whether he has the executive ability to adjust the task to the allotted time with due sense of proportion. All of these powers are powers which the skillful teacher ought to possess, and which may be fairly tested by a written examination. As the lawyer who cannot think of the proper argument to put forward, or the physician of the appropriate drug to prescribe, until after the critical moment, is at an enormous disadvantage, so the teacher who cannot think of the right thing to do or say, or the principal whose pedagogical knowledge is so profound that he cannot give it expression, is at as great a loss in the classroom as in the examination hall. The written examination, to serve its purposes, must, of course, be a test of whether or not the applicant has the knowledge, the power of thought, and the facility in expression that a teacher ought to have. An examination that would test mere book knowledge or memory would be practically useless for the purpose in view.

There are certain things, however, which a written examination cannot determine. It is not a certain test of moral character, or of personal charm, cleanliness, address, or even of teaching power. It does not reveal bodily deformity, sickness, faulty enunciation, or foreign accent. It is even within the limits of possibility that a man may write well who talks very badly and hence is unfit for teaching work. To determine these matters, other methods

of examination must be resorted to. The other methods which we use in New York I shall now describe briefly:—

1. An oral examination is given only to those whose marks in the written examination indicate that they are worthy of further consideration.

2. By the term "oral examination" we mean not merely the presentation and answering of oral questions, but also an exhaustive investigation of the past history and present qualifications of the applicant, both personal and professional. The ratio of the maximum record mark to the maximum oral mark varies according to the license sought. Some licenses require little or no teaching for eligibility, as, for instance, the initial license. Other licenses require large teaching experience, and this experience must necessarily be made a matter of investigation.

Just here let me say that written statements regarding teachers must be received and rated with the utmost care. They must be rated for what they do not say, no less than for what they say. For instance, I have before me, as I write, the record of a graduate of a largely attended normal school. The principal reports her as "good" in scholarship, as "high" in pedagogical work, as "good" in practice-teaching. He further says that his estimate of her general teaching ability is "good," and, in answer to the question, "Does the applicant speak the English language articulately and correctly?" he replies, "Yes." At the close of her first year of work in New York schools the principal of the school was called upon to report upon this teacher's work under several headings, as:—

Ability to comprehend instructions; skill in blackboard work; skill in questioning; thoroughness in developing subjects; use of objective illustration; self-control and manners; use of voice; control of class.

Her statement is:—

Miss Blank is deficient in all these qualifications. Her imperfect knowledge and very deficient enunciation of the English language render her incompetent to control or interest any class in this department.

This is only one sample out of hundreds which I might adduce to show that school authorities often use unnecessarily roseate language in writing testimonials. Episodes of this kind have led the board of examiners to lay great stress upon what they term the “oral examination.” They now lay such stress upon the mark on record, personality, and ability to speak the English language, that a bad mark in any one of these particulars nullifies the whole examination.

Turning from processes of examination to results, I am happy to be able to report that recent investigations have shown:—

First, that those persons who have received the highest standings at our examinations have, upon the whole, done better than those who received the lowest standings that were considered possible.

Second, nine tenths of those whom it has been necessary to dismiss at, or before, the close of the probationary term are to be found in the class of persons who received comparatively low standings at the examination.

Third, the examinations have been the means of bringing to the New York schools many teachers of high character and ability from other places, whose services it would not have been possible to obtain in any other way. When

it is known that the teachers in a city school system are appointed as the result of competitive examination, honestly and skillfully conducted, the best teachers from all over the country will flock to that city.

I am very far from claiming that the New York system of examination is perfect. I only say that it has served the purpose for which it was intended, upon the whole, in an admirable way. Indeed, I quite agree with Professor Cattell, who recently said : —

To devise and apply the best methods of determining fitness is the business of the psychological expert, who will probably represent at the close of this century as important a profession as medicine, law, or church.

Some of my audience may be inclined to say that much better than the New York plan of appointment by competitive examination is the plan, which has been tried in some cities, of committing the entire matter of selecting, appointing, and promoting teachers to one man, the superintendent. If, as one of my colleagues in New York recently expressed it, a man could be found who is infinite, eternal, and unchangeable in his being, wisdom, power, holiness, justice, goodness, and truth, we should all be entirely willing to place such vast powers in his hands. As such men are not to be found, the following objections to "one-man power" are, it seems to me, not unreasonable : —

1. No one man has the ability or the knowlege to perform so colossal a task in a large city. He might do it in a city of forty or fifty thousand inhabitants, but not in a city of half a million.

2. Where this plan has been tried, it has not infrequently resulted in the overthrow of the superintendent

who has honestly tried to perform a task, too great for any individual, under most distressing circumstances.

3. The effect upon the teaching force is not good. It is one of the weaknesses of our poor human nature that men and women will cringe before the man who has the power to aid or to injure. Teachers tend to lose independence of thought and action when they are placed absolutely in the power of a superintendent; and, just in proportion as they lose legitimate independence of thought and action, by so much is their good influence as teachers diminished.

I trust I have said enough to show that, in our large cities, training schools and the appointment or promotion of teachers as the result of competitive examination, should be established by law.

XXX

PRESENT PROBLEMS OF THE SCHOOL

(From the Educational Review, November, 1904)

BECAUSE parents do not in all cases desire education for their children, or, desiring it, do not know what good education is, or, knowing what it is, cannot afford to procure it for their children, the state is compelled, as a measure of self-preservation, and a means of progress, to assume the responsibility of establishing and maintaining schools. A despotic government may establish schools for the purpose of developing a particular type of subject — the soldier, for example — as was the case in Sparta. In a democratic society, however, the object is, not to develop a particular type of citizen, but to develop the fullest efficiency, individual and social, of each citizen. In the light of this fundamental truth, the following propositions regarding the functions of the state and the functions of the school in providing education will, I believe, be generally accepted.

FUNCTIONS OF THE SCHOOL

I. The public schools should provide such an education that the opportunities of all citizens to make a living and to lead happy and prosperous lives shall be equal, as far as education can make them equal.

2. The public schools should provide the highest quality of education, not only for the purpose of equalizing the opportunities of all, but in order that there may be a "perpetual succession of superior minds, by whom knowledge is advanced, and the community urged forward in civilization."¹ Even if comparatively few can avail themselves fully of such education, it is still invaluable to the many by supplying intelligent leadership and expert counsel. The field of human activity is so enormous that, in the more complicated affairs of life, each man outside a necessarily limited field of experience, needs and should learn to accept the guidance of experts—the specialists in the various departments of law, medicine, surgery, sanitation, engineering, agriculture, and the like. Moreover, as Professor Marshall has pointed out, at least one half of the best natural genius born into a country belongs to the manual labor classes. Without opportunities for the higher culture, the greater part of this "best natural genius" would be fruitless. Communities that do not provide facilities for the training of genius born in obscurity are on the highroad to decadence. These are the reasons why in all states of the Union, high schools, and in many states, colleges and universities, are maintained at the expense of the taxpayers.

3. The school, as distinguished from the college, provides training for childhood and youth. The period of childhood, from the point of view of the school, extends from the third or fourth year to the twelfth; and the period of youth from the thirteenth to the eighteenth.

¹ John Stuart Mill, "Principles of Political Economy," Book V, Chapter XI, § 8.

4. The state should require that the primary elements and means of knowledge should be taught to all children.

5. The school should provide training for the body as well as for the mind, because the physical nature is the foundation of all life, including the mental; because for good or ill the condition of the body influences the mind, and the condition of the mind influences the body; because without due coördination between the mind and the body, no person is thoroughly equipped for the battle of life; and because a race of men and women capable of enduring the labors of peace and the hardships of war is necessary to the safety of society.

6. The intellectual training given in the schools involves, in the first place, the adjustment of the mind to its spiritual environment through gaining some knowledge of the intellectual inheritances of the race, and, in the second place, the development of the qualities of industry, energy, helpfulness, and devotion to duty — qualities necessary both to individual and to social progress.

These six propositions are, I think, fundamental. They give rise, however, to a host of most difficult problems in practical administration. The limit of this paper permits me to discuss briefly only a few of the most important: —

PHYSICAL EDUCATION

First among these problems is the problem of physical education.

For the purposes of training the body directly and the mind indirectly, four agencies are more or less employed in some schools and should be extensively employed in all

schools: play, gymnastics, athletics, and manual training. Play has been defined as "the spontaneous physical expression of individuality"¹; it is "nature's way of preparation for later serious living." In the school its use is imperative as affording relaxation and reaction from work and as preserving the individuality of the pupil by affording him an opportunity to follow his own bent. Gymnastics is exercise directed to curing physical defects and to making the body strong and graceful. Athletics consists of organized play involving feats of strength, skill, and agility, performed by several persons in competition. In addition to the physical qualities developed by gymnastics, athletics develops the intellectual qualities of alertness, self-knowledge, executive ability, and "presence of mind," or the ability to think effectively in a crisis; and the moral qualities of self-control, self-reliance, courage, endurance, humility in victory, fortitude in defeat, and loyalty to one's fellows through working together for a common end. Manual training specifically trains the hand as the executive of the mind; it gives opportunity for self-expression in material forms — raffia, paper, pasteboard, cloth, wood, and metal; it gives facility in the manipulation of the simplest and most generally used tools that have aided man in his ascent from savagery; it cultivates the mental and moral habits of accuracy and truthfulness, and it induces a realization of the dignity of labor.

Without these four forms of physical culture — play, gymnastics, athletics, and manual training — no school is doing its perfect work.

¹ Horne, "The Philosophy of Education," p. 74.

Only in very recent years has the conception of physical education as an essential part of a child's training found its way into educational theory and practice. Hence the people's schools in our large cities are, as a rule, very inadequately equipped for any of the forms of physical education.

A most serious difficulty in the way of providing such equipment is raised by the congestion of population in our large cities, caused partly by the ever increasing immigration and partly by the continuous movement of population from rural to urban life. The result is a deplorable lack of space in which children may play. This condition exists in nearly all our large cities, and particularly in New York, where the huge tenement, crowded to suffocation, full of nerve-racking noises, abominable stench, and woe-filled sights, is the home, if home it may be called, of hundreds of thousands of children. With no place to play but the streets, boys, so deep-seated is the instinct for play, form organizations of their own for street games. The organization is the gang, and the games are gambling, stealing, fighting, and sometimes even stabbing or shooting. With no comfort or privacy in the rooms they call home, girls show a constant tendency to degenerate both physically and morally. Moreover, the poorer classes are in these days invariably the most prolific. If, as Prime Minister Balfour recently pointed out, the chief burden of perpetuating the race falls upon the poor in urban communities, then it is essential to the well-being of society that the school should labor incessantly for their physical improvement.

The physical education problem of the school is, there-

fore, twofold: to secure equipment for gymnastics and manual training in school buildings and to provide space for athletics and free play, in which the child's individuality may have scope to develop amid pleasant and healthful surroundings.

AFTER-SCHOOL USE OF PUBLIC SCHOOL BUILDINGS

A partial solution of the problem is to open the school buildings and yards in the afternoon and evening throughout the school year and during the summer vacation for purposes of manual training, gymnastics, athletics, and free play. The New York educational authorities are using the school buildings in this way. The result is that thousands of children find rest, recreation, and improvement in the school buildings, that the "little mothers" find peace and quiet for their infant charges, and that hundreds of street gangs are converted into boys' clubs earnestly seeking self-improvement.

Even, however, if every schoolhouse in the city were used at all reasonable hours for purposes of recreation and improvement, the measure would still fall short of counteracting the tenement house evil. The tenement house destroys the home; and without the well-ordered home and its influences, the school can accomplish comparatively little. Nothing short of a revolution in the existing tenement house system will restore the life of the poor in the city of New York to something like normal conditions. And how is this to be accomplished? I answer unhesitatingly that the tenement house, as it has been known in New York City, must be eradicated.

BETTER HOUSING FOR THE POOR

University and other social settlements are doing good, small parks afford some relief, and the public schools are doing a good deal and may do much more, but none of these instrumentalities goes to the root of the matter. The central evil of the crowded tenement is that it destroys home and family life, and no cure will be complete except a cure which restores to the poor man in cities the possibility of making a home for his wife and children. To this end, the municipality should lay down strict rules, determined by experts, as to the height, floor space, air space, and number of families to be accommodated, according to which all tenements built by private owners shall be constructed. New York took a considerable stride in this direction by its tenement house law of 1901, but the remedy is far from being sufficient. The municipality should employ its credit to purchase tracts of unoccupied land upon which to erect model homes for workingmen amid pleasant and sanitary surroundings, and rent, or sell them, at a moderate profit.

To such a scheme the objection will be made that it is rank paternalism. I answer that paternalism is justified when private initiative fails to root out an evil that is sapping the vitality of the nation at its root — the home life of the people. Again, it will be objected that municipal management is often, if not generally, characterized by carelessness, extravagance, and fraud. The all-sufficient answer is, first, that no amount of plundering and blundering on the part of municipal authorities could equal in its bad effects the evil wrought by the heartlessness and rapacity

of tenement landlords; and, in the second place, that experience amply demonstrates that committees of citizens, serving without remuneration, through salaried experts, manage vast undertakings and enormous properties with economy and efficiency. The essential condition is that the undertaking should be large enough to warrant the employment of experts of first-class ability.

The school should and must at all waking hours do all that its resources permit, to supply what the home, even under the most favorable conditions, loses by moving from agricultural to urban life; but if the home and its wholesome influences are not to be obliterated among the city poor, the city must see to it that the so-called working classes are enabled to live in homes where homely virtues have a chance to flourish and where children have space to play.

FEEDING SCHOOL CHILDREN

But there is still another aspect of physical education. Education, whether physical or mental, is seriously retarded, if not practically impossible, when the body is improperly or imperfectly nourished. The child of poverty, with body emaciated, blood thin, and nerves on edge, because he has not enough to eat, grows up stunted in body and in mind. What a farce it is to talk of the schools providing equal opportunities for all when there are hundreds of thousands of children in our city schools who cannot learn because they are always hungry! The schools of Paris provide at cost price a simple, wholesome mid-day meal for their hungry children. In many places in the British Islands the same thing is being done. Should we do less in the cities

of democratic America? In no other way can we be sure that the schools will, as far as education may, provide equal opportunities for all.

TIME LIMITS OF ELEMENTARY AND SECONDARY EDUCATION

Another of the very serious problems of school administration confronting us at present is the division of time as between the elementary school and the high school. The customary division assigns two years, from the ages of four to six, to the kindergarten; eight years, from six to fourteen, to the elementary school; and four years, from fourteen to eighteen, to the high or secondary school. If it is true, as is now generally believed, that the period of childhood closes at twelve, that the period of youth begins at thirteen, and that the child and the youth need different subject matter and different methods of teaching, it is obvious that a distribution of time which requires two years of the period of youth to be spent under school conditions fit only for the child, is open to most serious objections. Specifically stated, these objections are as follows:—

First, the present arrangement causes the loss of valuable time by prolonging for two years a method of teaching that is fitted only for children; second, it unduly defers and therefore unjustly abbreviates the time devoted to foreign languages, to the higher mathematics, and to science; and third, in cities where school accommodations are limited in proportion to the number of children, it is wasteful, because while the classrooms occupied by grades of the first six years are crowded, those devoted to the seventh and eighth years are often partially empty.

In order to obviate the waste of effort, of time, and of

space involved in the present organization of schools, I suggest the following arrangement:—

1. School life, above the kindergarten age, should be divided into two equal periods—the elementary, corresponding to the epoch of childhood, and the secondary, corresponding to the epoch of youth. Each period would provide for six years of school work—the elementary, from six to twelve; the secondary, from thirteen to eighteen.

2. For economic reasons, inasmuch as children leave school rapidly after they are of age to go to work, the secondary schools should be of two kinds, which might be called the preacademic and the academic. The pre-academic schools would provide three years of work, from thirteen to fifteen, and would be established at convenient points selected with a view to accommodate the children promoted from the elementary schools. The academic schools, which would be comparatively few in number and established only in crowded centers, would provide another three years of work for youths from sixteen to eighteen. In this way space would be economized, much more work would be accomplished, and it may be reasonably anticipated that our young men and young women, before leaving the high school or academy, would have covered most, if not all, of the work that is now accomplished by the end of the sophomore year in the average college. A beginning of this plan has been made in several cities by the enrichment of the last two years of the elementary course of study, through the introduction of a foreign language, algebra, and elementary physics. The gradually extending use of the departmental system of teaching, by which

one teacher, instead of teaching all subjects for a year or half a year, teaches one subject through two years, is also contributing to the same result. Teachers who teach subjects for which they have special talent and preparation, and in which they are interested, to pupils thirteen and fourteen years of age, are almost certain to adopt methods suitable to the period of youth rather than to the period of childhood.

THE ELEMENTARY CURRICULUM

After the problem of the distribution of time comes the problem of the elementary curriculum. What studies shall be pursued by children between the ages of six and thirteen? The answer to this question is found in the fundamental assumption that mental education is the gradual adjustment of the child to his spiritual environment.

President Butler was probably the first to advance this view of education as a development of Mr. John Fiske's discovery that the prolonged period of infancy in the human race lies at the foundation of family life. President Butler defines our spiritual environment as "the spiritual possessions or inheritances of the race."¹ These spiritual inheritances he classifies as our scientific inheritance, our literary inheritance, our artistic inheritance, our institutional inheritance, and our religious inheritance. As education is the work of the school, it is obviously, then, its function to introduce the child to his spiritual inheritances. As a recent writer has well expressed the thought: "This production from within the mind of its own world in response to the stimulating effects of the world without

¹ Butler, "The Meaning of Education," p. 17.

is education as a process, as an activity: . . . What his race has produced, he (the youth) reproduces, and thus universalizes his individual nature and socializes his private impulses."¹

This philosophic view of education which calls, as far as may be, for the reproduction in the individual of what has been produced by the race, is responsible for large additions to the elementary curriculum. At the same time, and in entire harmony with the philosophic view, there has been a constantly growing demand on the part of the people for the teaching of such subjects as carpentry, sewing, and cooking. Hence there has arisen the problem of the curriculum. Since we can teach but a small fraction of our spiritual inheritances, on what principle shall we make the selections? How shall we avoid giving teachers more to teach than they can teach well, and pupils more to learn than they can learn well? How shall we prevent what is popularly known as the "overcrowding" of the elementary curriculum?

Twenty-five years ago the average elementary school in America taught reading, writing, spelling, grammar, geography, United States history, and what was called civics. In order to fill in the time, arithmetical rules of no possible use in life were taught, and the children's wits were exercised or blunted by outlandish mathematical puzzles; a manual of United States history and the Constitution of the United States were learned by heart; long lists of meaningless names were memorized in geography; parsing with the utmost detail was continuous; drawing, where drawing was taught, was exclusively from flat copies;

¹ Horne, "The Philosophy of Education," p. 100.

and the crowning glory of the school was held to be the ability to spell sesquipedalian words whose signification had never dawned upon the childish intellect. The lack of intelligence in this work is to be accounted for by two facts : first, that teachers were not as well educated or trained as they are to-day ; and second, that in the absence of interesting subject matter, they required their pupils to commit to memory dry and useless details in order to fill up the prescribed time. The additions that have been gradually made are nature study, which is intended to train what President Eliot calls "capacities for productiveness and enjoyment" through the progressive acquisition of an elementary knowledge of the outside world ; algebra, chiefly as an aid, through the equation to the solution of arithmetical problems ; inventional geometry ; literature, studied as such, distinct from the ordinary reading lesson ; language and composition, as the art of expression ; drawing from objects ; and manual training and other physical exercises. This seems a long list of subjects, and yet every subject is justified and required by the fundamental assumption that the school exists for the progressive adaptation of the child's mind to its spiritual environment. In other words, each child has a right to the acquisition not only of the tools of knowledge, but at least to the beginnings of a knowledge of literature, of science, of art, of institutions, and of ethics, so that when he leaves school he may be able to continue along the road on which he has started. Educators throughout the United States are now practically agreed that each of these great divisions of knowledge should be represented in some way in each year of the course.

How, then, has room been made, or may room be made,

for the new subject matter and the new activities? In the first place, through the correlation of studies, the re-enforcing of one study through other studies, as the correlation of history with geography, and of composition with literature. In the second place, through improved methods of teaching, so that more work is accomplished in a given time. The early introduction of the idea of ratio in arithmetic, and the use of the phonetic method in teaching reading, are cases in point. It is safe to say that when reading is scientifically taught the average child reads better at the end of the first year in school than twenty-five years ago he could read at the end of the third year, and that he actually reads five times as much matter during the first three school years as he read during the same period a quarter of a century ago. In the third place, time may be saved by lopping off useless and wearisome detail in all subjects. To a considerable extent this pruning process has been applied in the best schools.

That the memorizing of unnecessary details has not altogether gone out of fashion, however, is shown by the recent exposure of methods of teaching history in the high schools of one of our most enlightened states. One hundred students who entered a state normal school were asked to write answers to the question, How were you taught history in the public school? Of the one hundred, sixty-two answered that they had "memorized the textbook and recited it word for word as nearly as possible."¹ But history is not the only subject in which children's time is wasted and their interest destroyed by memoriter methods. In geography, in grammar, in arithmetic, even

¹ *Educational Review*, May, 1904.

in nature study, it is still not unusual to find teachers consuming their pupils' time in memorizing unessential details and a vast redundancy of technical terms.

Mr. Frank McMurry lays down the following plain rules for the rejection of superfluous subject matter in teaching:—

(1) Whatever cannot be shown to have a plain relation to some real need of life, whether it be æsthetic, ethical, or utilitarian in the narrow sense, must be dropped.

(2) Whatever is not reasonably within the child's comprehension, likewise.

(3) Whatever is unlikely to appeal to his interest; unless it is positively demanded for the first very weighty reason.

(4) Whatever topics and details are so isolated or irrelevant that they fail to be a part of any series or chain of ideas, and therefore fail to be necessary for the appreciation of any large point. This standard, however, not to apply to the three R's and spelling.¹

The intelligent application by teachers of these four rules, together with the more general dissemination of improved methods of teaching, will gradually solve the problem of the "overcrowding of the elementary curriculum."

THE ELECTIVE SYSTEM IN HIGH SCHOOLS

The elective system, which has obtained so firm a footing in American colleges and universities, has spread to the secondary schools, while there are not wanting those who argue in favor of introducing it into the elementary

¹ *Educational Review*, May, 1904.

schools. Some would go so far as to say that a youth of fourteen should be permitted while in high school to pursue as many studies or as few studies, for as long a time or for as short a time, as he pleases. Though there are few who take this extreme view, yet the elective principle has found a firm lodgment in the secondary school. For the most part it takes the form of a choice between a college preparatory course, a commercial course, and a manual training course, or a choice between two or more related subjects of study. If we assume, as I think we must, that the principle of election has been firmly established in the secondary schools, the problem which at once arises is: How shall the student be guided to a wise choice of courses and of subjects? Obviously, when he enters, the teachers of the secondary schools cannot advise him, because when he presents himself at their doors they know nothing of his special aptitudes and little of his previous studies. In the great majority of cases, parents are quite as incompetent as his new teachers to give him useful counsel. How is the boy, at the age of fourteen, to determine whether he shall take the college preparatory course, or the commercial course, or the manual training course? Here is a problem of the first importance. It is of the first importance to the boy himself, because his future happiness and success in life depend in no small measure on the prudence with which he makes his selection. It is of the first importance to society, because there is no economic waste comparable in its proportions to that occasioned by setting people to work for which they have no natural aptitude. How, then, is the problem to be solved? I fear we must lay the burden in the first in-

stance on the elementary school — a burden which that institution has hitherto made but little effort to assume. That the elementary school has not done more to guide the future academic work of its pupils is generally attributed to one or other of two causes, neither of which I believe to be tenable. In the first place, it is claimed that the elementary school presents the same subject matter and the same activities to all pupils, and therefore turns out a machine-made — I believe that is the term generally employed — a machine-made product that is alike in all its parts. The answer is that the elementary school must of necessity present the same subjects and the same activities to all its pupils, because these subjects and these activities constitute the necessary food and the necessary training of the child mind; that the use of the same studies and the same exercises does not result in producing the same type of mind and disposition, because different minds, according to inherent capacities, react in different ways upon the same stimuli; and, finally, that the intellectual capacities, dispositions, and tendencies of the graduates of the elementary schools are actually not alike, but as various as there are individuals. The second criticism is that the bright pupil is made to keep step with the dull pupil. "Marking time" is the phrase used in the educational cant of the day. To properly administered schools this criticism does not apply. Even if it did, however, the pity lavished on the particularly bright pupil is largely wasted. He can generally take care of himself. Our sympathy is needed, not for the bright, precocious pupil, but for his duller, though not on that account less able, associate. The problem really is, not how to drive the bright pupil

through the grades at railroad speed, but how to give the slower pupil the assistance—but little will be needed in the majority of cases—that will help him over obstacles and enable him to keep up with his more brilliant companions. Any school which lavishes the time and energy of its ablest teachers on the more brilliant, to the neglect of the duller pupils, falls far short of its duty.

The fault, then, lies neither in the sameness of the curriculum nor in the retardation of bright pupils, but in the failure of elementary school principals and teachers to realize their responsibility for the future welfare of their pupils. Where, on the other hand, all pupils have equal opportunity and equal advantages, there the teachers, if they take an interest, may note the different reactions produced by identical stimuli on different minds, and advise the boy of literary ability to take the college preparatory course, the one with business instincts to take the commercial course, and the one with a turn for mechanics to pursue the manual training or mechanic arts course. In this way the elementary school may become of much greater benefit to society than it is at present.

The elementary school can, however, guide only the first steps of the student. After he has fully entered upon the work of the secondary school, it becomes one of the chief duties of that institution to train him to make intelligent selection among courses and subjects of study.

There remain to be considered three problems of the highest importance in the administration of the American school—the problem of compulsory attendance, the problem of the supply of teachers, and the problem of finance.

COMPULSORY EDUCATION

Most of the northern states of the Union have enacted compulsory education laws, more or less stringent in their nature. These laws are not, however, strictly enforced. In the South there is not even a pretense made of compulsory school attendance. Several reasons may be assigned for the laxity that undoubtedly exists in the enforcement of compulsory education laws: a widespread repugnance to state interference with the supposed liberties of parents; the opposition of the employers of child labor, such as the cotton manufacturers of the South, the coal-mine owners of Pennsylvania, the glassmakers of New Jersey, the sweatshops of New York, and the small traders in all large cities; the opposition of private schools which dread a diversion of their children to the public school; the opposition of some foreign-born, non-English-speaking communities, founded on the fear that their children would, in the public school, lose the use of their native tongue; and, lastly, the lack of adequate administrative machinery for the enforcement of existing laws.

Gradually to overcome this widespread opposition to compulsory school attendance, the following measures are suggested:—

1. Governmental registration and inspection of all private and parochial schools, to the end that no school may be permitted to exist which does not teach its pupils the English language and the elementary duties of citizenship. There should be no interference—public opinion in America would not tolerate any interference—with endowed, proprietary, or sectarian schools, if such interference would

in any way limit the liberty of teaching or the rights of parents to determine the schools in which their children shall be trained. Such interference on the part of the state should be forbidden for educational as well as political reasons, because the competition of private schools is essential to the well-being and the growth of public schools. On the other hand, the state owes it to society, and society owes it to itself, to see to it that all its future citizens, either in public or in private schools, are taught the English language and at least an elementary knowledge of American history and institutions, and that they are taught by persons who are qualified to teach.

2. The registration of all children in large cities. If such a measure is necessary in the comparatively stable population of Paris, in order to secure a strict enforcement of a compulsory education law, how much more necessary is it in a city like New York or Chicago, in which population is constantly shifting over a widely extended urban territory, and to which is added annually an enormous influx of non-English-speaking foreigners?

3. The education of society to a realizing sense of the necessity on social grounds of a strict enforcement of a reasonable compulsory education law. The great truth must be brought home to all that the man who fails to educate his children commits a twofold sin — a sin against his children, whom he deprives, as far as his power goes, of the ability to live happy and prosperous lives; and a sin against society, which suffers and deteriorates in proportion as its members fail to participate in the spiritual inheritances of the race and fail to receive that training for citizenship which springs from association in the exercises

of the school. On the other hand, I may justly claim for my country that there is no other in which education is more generally appreciated, or in which it is pursued with greater zeal. The enthusiasm of the many will not, however, atone for the indifference of the few.

THE SUPPLY OF TEACHERS

The problem of the supply of teachers presents three principal phases:—

1. How shall teachers be trained?
2. How shall teachers be appointed?
3. Shall women teachers continue in the vast majority in American schools?

THE TRAINING OF TEACHERS

There are two prevailing types of method in training teachers, whether in the university, the normal school, or the city training school: that which regards the study of the science and art of teaching as incidental to the acquisition of scholarship, and that which looks upon it as a pursuit requiring the undivided attention of the student. Just as the professions of medicine, law, theology, and engineering now require that the intending licentiate shall devote some years to the exclusive study of the principles and technique of his future work, so it may be confidently predicted that in the not distant future every person who is to teach our children shall be required not only to reach a high standard in scholarship, but to devote from two to four years to special preparation for the most delicate and difficult of all arts—the art of training children.

HOW SHOULD TEACHERS BE APPOINTED?

Up to forty years ago the conception was widely prevalent throughout the United States that any one who knew enough to keep ahead of his pupils in their lessons was sufficiently well instructed to be appointed a teacher. The natural result of this generally accepted view was the appointing of teachers by citizen committees who were too often swayed by prejudice, favor, or political and religious considerations. As a higher conception of the school and its functions and of the teacher and his duties has gained ground, we are slowly, but surely, realizing the necessity of a method of appointment and promotion that will relieve the teacher from humiliation and the schools from the incubus of political management. Two plans have been somewhat widely tried: appointment by a single expert, supervisor or superintendent, and appointment as the result of competitive examination. Appointment by a superintendent has been known to lead to the displacement of an honest and fearless official and the substitution of one who is subservient to political control, and is not likely to be extended. Appointment by competitive examination, on the other hand, while it may not always attract the right persons to the right places, is slowly, but surely, gaining ground. It has raised the standard of scholarship and professional equipment among teachers. As a general rule, it selects the best from among a mass of applicants for a given position; and it preserves the self-respect of the individual teacher, because it frees him from the necessity of begging or cringing for a position, and enables him to feel that he obtains appointment or promotion solely upon

his own merits. As communities awake to the necessity of delivering their schools from the abhorrent influences of political and ecclesiastical patronage, we may look to see a more rapid spread of this method of appointing and promoting teachers.

"FEMINIZATION" OF AMERICAN SCHOOLS

Attention has recently been attracted by the report of the Moseley Commission to what has been called the feminization of American schools, because the great majority of public-school teachers are women. It was an economic reason, in the first instance — the fact that women work for smaller wages than men — that led to the present preponderance of the feminine element in the teaching force. It is more than doubtful, however, whether American schools and American education have deteriorated in consequence. It is quite certain that the refined woman of to-day who has been thoroughly trained is a much better teacher than the coarse, ignorant, pedantic schoolmaster of fifty years ago, who excited no feeling but contempt, hatred, or terror in the breasts of his pupils. We all believe in the salutary influence of the masculine mind in teaching, particularly in the case of older pupils, but we also believe that the influence of a strong woman is better than that of a weak man; and that a woman teacher of ability who is devoting her life to educational work is apt to be a better teacher than the male fledgling who takes up teaching as a makeshift, and whose mind is set, not upon education as a career, but upon law or medicine. In short, to increase the efficiency of the public school teaching force by increasing the number of efficient men teachers — men who

would devote their lives to the work — would involve a largely increased expenditure of money, in order to induce such men to make teaching their life work. And this brings me to my last problem — the problem of finance.

FINANCIAL SUPPORT OF PUBLIC EDUCATION

If we are to have schoolhouses properly equipped for the training of the body as well as the mind — for manual training, play, gymnastics, and athletics; if all children are to enjoy their God-given right to education; if schools are to be equipped for scientific as well as literary studies; if salaries are to be paid to teachers that will attract men and women of breeding and refinement to the teaching profession; and if all the teachers are to be thoroughly trained, so that they will be models to imitate and persons capable of arousing interest and inspiring effort,—if all these things are to be accomplished, it is evident that the sums devoted to education in America, enormous as they are, must be very greatly increased. For effective purposes, the revenue of a public school system ought to possess two characteristics: first, it should be ample; and second, it should be stable. It should be sufficiently ample in each community to provide schooling for all children in classes not to exceed forty to a teacher, and in adequately equipped buildings; to pay teachers reasonable salaries, so that they may be able to live in refined surroundings and take advantage of opportunities for self-improvement; and to provide pensions after retirement, so that while in active service they may be relieved of anxiety regarding provision for old age. It should be stable, so that the educational authorities may be able to carry out a consistent and pro-

gressive policy. It should not be subject to the whims and caprices of the politicians who control the municipal administration of our large cities. It should not be fluctuating from year to year, and thus lead to the establishment of activities one year which must be abandoned for lack of funds the next.

I have selected from among the innumerable problems in school administration which now confront the people of the United States those that seem most important and most urgent, and I have ventured in each case to suggest a solution. Every solution proposed involves an increased expenditure of money. Immeasurably more effective, however, than money — vital though money is — to uplift the school, are the love and skill of the devoted teacher. Love for children and teaching skill are the greatest things in the school.

XXXI

THE AMERICAN TEACHER—A CODE OF ETHICS

*(From the Convocation Address at the University of Chicago,
December 16, 1902)*

THE right of the state to educate is in this country almost universally admitted. That right rests upon no unsubstantial or visionary foundation. It is implied in the end for which men have established government. The end of government is to accomplish the objects of organized society. Among the chief objects of organized society are, first, the development of the best powers—intellectual, moral, and physical—of the individual; and second, equality of opportunity in the pursuit of whatever makes life worth living. Universal education is the one essential condition under which these objects may be realized. Without universal education there cannot be universal individual development. Without universal education there cannot be equality of opportunity for all. To provide, to insure, and to compel universal education is an undertaking far beyond the powers of any authority short of the state itself. As John Stuart Mill argued, because parents are unable or unwilling to provide the best education for their children, or, being able and willing to provide education, do not know what the best education is, the state must undertake the work.

Without universal education, moreover, no government that rests upon popular action can long endure. Where the people are sovereign, the people must be schooled in the knowledge and in the virtues upon which free institutions depend.¹ If for no other reason, public schools are necessary to keep alive the traditions of our history ; are necessary lest we forget the glories of Yorktown and Bunker Hill, the principles of the Declaration, and the memories of Washington and Lincoln.

In words of weighty import, Andrew D. White has warned the United States of the danger of neglecting popular education. "A number of great republics, officered by great men," he has said, "have existed in the world. Their history has been very brilliant, and yet, of them all, only two remain — only two can be said to have lasted." (He regards the Republic of France as still only an experiment.) "I am speaking of Switzerland and the United States. Those two republics differ from all the others in only one particular. Other republics have been deeply religious. The republic at Florence was as deeply religious as any community that ever existed. They have had every virtue except an enlightened body of citizens. Switzerland and the United States have that." The lessons of recorded history are in harmony with the theory that the enlightenment of the great body of citizens through universal education is the sole condition under which a republic can endure.

But then the question arises: What is education ? There have been some great definitions of education — all sublimely true, but each open to some objection. When

¹ Woodrow Wilson, "The State," p. 667.

Comenius says, "Things that should be done must be learned by doing"; when John Dewey says, "Education is not preparation for life, it is life"; when Pestalozzi says, "Education is a generation of power"; when Froebel says that education is "the harmonious growth of the body, mind, and soul," we all feel the force of the words, but we also realize that the language is too mystical for general comprehension. Even when Colonel Parker grew eloquent—and when was he not eloquent?—on the ideal school as the ideal community, we could not, when released from the spell he wove around us, help feeling that there was something lacking—that he was describing the ideal conditions for education rather than ideal education itself.

Perhaps the first approach to a scientific definition of education was that made by John Stuart Mill in his St. Andrews address. Education, he says, is "the culture which each generation purposely gives to those who are to be its successors, in order to qualify them for at least keeping up, and, if possible, for raising, the improvement which has been attained." President Butler has shown that there is a scientific basis for Mr. Mill's definition which Mr. Mill himself probably never suspected, because he never realized the full significance of the doctrine of evolution. President Butler takes as the starting point of educational science John Fiske's great contribution to the evolutionary theory that the prolonged period of infancy in the human race which is necessary to bring about the adjustments—physical and spiritual—of the child to its environment, lies at the foundation of the human family, and therefore at the foundation of society and of institu-

tional life.¹ "After the physical adjustment," as Dr. Butler puts it, "is reasonably complete, there remains yet to be accomplished the building of harmonious and reciprocal relations with those great acquisitions of the race that constitute civilization; and therefore the lengthening period of infancy simply means that we are spending nearly half of the life of each generation in order to develop in the young some conception of the vast requirements of the historic past and some mastery of the conditions of the immediate present."² In other words, the doctrine of evolution teaches us to look upon education as the work of adapting and adjusting our self-active organisms to the acquisitions and attainments of the race which have well been called our spiritual inheritances."

Our spiritual inheritances Dr. Butler classifies as our scientific inheritance, our literary inheritance, our æsthetic inheritance, our institutional inheritance, and our religious inheritance. This classification is sufficiently comprehensive. No part of the achievements of the human race — not science, not literature, not art, not history and laws, not religion — may be omitted from the work of education. For one and all of them, if our republic is to be preserved through the enlightenment of its citizens, if all our citizens are to have equal opportunity for individual development and for advancement, place must be found in the education of the school and the education of the home.

And yet there still seems something lacking. A man may, like Coleridge, have entered generously into the spiritual inheritance of the race, and yet remain an eater of opium and a dreamer of dreams; he may hide his talent

¹ Butler, "The Meaning of Education," p. 10.

² *Ibid.*, p. 13.

in a napkin and have nothing to show for his stewardship; he may wrap himself in the cloak of selfishness or pour forth his strength in sensuality; and the world is full of examples of men of great intellectual attainments who have oppressed and maltreated their fellow men; all these things and more a man may do in spite of his intellectual acquisitions, unless he has developed certain qualities of mind and heart without which neither knowledge nor riches avails.

Mr. Benjamin Kidd in his great work on "Social Evolution" has, to my mind, made a most important contribution to the theory of education which may help us to find what seems lacking in the definitions of Mill and Butler, and to explain what is mystical in the definitions of Froebel and Pestalozzi. He first shows that the stupendous achievements of the human mind during the nineteenth century in mathematics, in pure science, and in the applications of science to industry were not the colossal products of individual minds, but "the results of small accumulations of knowledge slowly and painfully made and added to by many minds through an indefinite number of generations in the past, every addition to this store of knowledge affording still greater facilities for further additions." So far, Mr. Kidd's doctrine of progress is in accord with Mill's and Butler's theories of education. But then he finds another element. It is not so much intellectual capacity, he claims, that has caused the evolution of the highest civilization, but the development of certain other qualities which we may call ethical, moral, or religious. "A preponderating element," he says, "in the type of character which the evolutionary forces at work in human society are slowly developing, would appear to be the sense of reverence. The

qualities with which it is tending to be closely allied are great mental energy, resolution, enterprise, power of prolonged and concentrated application, and a sense of simple-minded devotion to conceptions of duty." It would appear, therefore, that in any educational scheme to exalt a nation, we must include not only the acquisition of our intellectual inheritance, but also the development of the ethical qualities of reverence, resolution, power of prolonged and concentrated application, and simple-minded devotion to conceptions of duty. Quite recently President Eliot in a notable address traced the existence of many of the ills to which modern society is heir — the gambling habit, the drink habit, the reading of ephemeral and degrading literature, and the appeal to force instead of to reason as in strikes and mob violence — to the failure of the schools to train the intelligence, the reasoning powers of their pupils. Doubtless there is much truth in the statement, and President Eliot did a great public service in calling attention to the truth. But is it not also true that these very evils are due quite as much to the lack of moral principle as to the lack of reasoning power? Gambling and intemperance are quite compatible with high intellectual attainments, but not with reverence and simple-minded devotion to conceptions of duty.

Again, does not the adjustment of the child to his environment in that process which we call life, necessarily involve an ethical as well as an intellectual element? Not only is the child molded by the environment into which he is born, but for good or for evil he helps to modify that environment. He has his influence on all with whom he comes in contact. Every action he performs produces

some reaction in others. Are these reactions good in their tendency, or are they evil? Surely this is a question every man should put to himself. Surely every child should learn to ask himself: What will be the effect of this action of mine upon my fellows? Will it injure them? Will it help them? In defining education, accordingly, in terms of the adjustment of man to his environment, we must not, while seeking for the influence of environment on man, forget that man influences environment, that action always begets reaction. Education ought to train men to transform their environment for the better. And this is of the very essence of morality.

Now, if education is necessary to conserve the two main objects for which society is organized—to promote individual development and to secure equality of opportunity to all; if, further, universal education is necessary to the preservation of our republican institutions; and if, lastly, education involves the development of the highest ethical qualities, as well as the acquisition of our intellectual inheritance, in order to adjust the child to his environment; surely it follows that the persons to whom this all-important work is intrusted cannot be too accomplished, cannot be too highly trained, and cannot be held to too rigid an accountability. If we think of the teacher's work as the foundation and the safeguard of our political institutions, we may not unreasonably suppose that he should possess some of the attributes of a statesman. If we keep before our minds the vast task of introducing the young into their intellectual inheritance, we may look for the mark of the philosopher. If we think of his duties in the inculcation of a high morality, we may regard him as "an

under-shepherd of the Lord's little ones," even as a great evangelist. If we think of the battles he is called upon to fight, especially in our great cities, against ignorance and vice and against the abhorrent forces that would prostitute the public schools to selfish purposes and drag them in the mire of party politics, we may think of him as the soldier of a hundred battles. Ofttimes, too, when we see his high-mindedness in presence of affront, his fortitude in resisting tyranny, and his patience in opposing intrigue and enduring scandal, we should not be far amiss in placing the crown of martyrdom on his brow. There are few in whom are found mixed all these qualities of the ideal teacher. One such there was, however, whom Chicago knew well — Francis Parker. Him the University of Chicago delighted to honor, for he was a statesman, and he was a philosopher, and he was an evangelist, and he was a soldier, and in very truth he was a martyr. The memory of such a martyr is the seed of the schools. To few in any age are given the great abilities and the great opportunities that made Francis Parker the heroic figure he was. Yet none need despair. The opportunities for efficiency come to every teacher. The humblest mistress in a country school, who inspires her pupils with the thirst for knowledge, the love of truth, and the desire for the higher life, is as truly in the class of real teachers as Socrates or Froebel, Pestalozzi or Parker.

And yet the most ardent admirer of our public school system will be constrained to admit that teaching, except in the case of college or university teaching, is not recognized as one of the learned professions, as the professions of law, medicine, and theology are recognized; that public

school teachers are not doing all that might reasonably be expected to foster the growth of intelligence and morality ; and that they neither meet with that social and financial recognition nor exercise that influence in the community which the supreme importance of their calling deserves and demands.

How are we to account for this strange anomaly — that teachers should be called upon to do the work which is most needed to preserve the republic and yet receive so little recognition, either financially or socially, at the hands of the people whom they serve ? Some would account for it by the undoubted fact that the teacher's calling leaves its mark on the teacher and by so much unfits him for general society. Charles Lamb gave expression to this view when he asked the question, "Why are we never quite at ease in the presence of a schoolmaster ?" "Because," he answers, "we are conscious that he is not quite at his ease in ours. He is awkward and out of place in the society of his equals. He comes, like Gulliver, from among his little people, and he cannot fit the stature of his understanding to yours. He is so used to teaching that he wants to be teaching you."

The unerring shaft of Lamb's genial satire discovers a weak point in our harness and inflicts a wound — though a wound that is not mortal. May not we teachers retaliate by asking what calling there is that does not leave its mark, physical or intellectual, on him who follows it ? The blacksmith through the constant use of his brawny right arm becomes lop-sided ; the sailor rolls in his walk on land as a ship rolls at sea ; the popular physician acquires blandness of manner and a deferential smile and the habit

of never committing himself lest he should afterwards be convicted of error; the preacher rarely throws aside his preaching voice; while the lawyer speaks of ordinary matters in the language of his brief, and is always "objecting" to your conclusions or cross-examining you on your facts. The truth is that all vocations leave their impress on the physical and intellectual man. It is only the very strongest souls that preserve their perfect poise and keep themselves free from the mannerisms of their calling. This, then, cannot be the reason why teachers receive so little recognition.

Others would account for the schoolmaster's position at present and for the ridicule that has been heaped upon him in literature by the deplorable fact that from time immemorial he has used corporal punishment as an element in teaching. There is only too much truth in the statement. Everywhere, doubtless, the conduct of the schools is to-day far more humane than it was in the Middle Ages, when, to use Oscar Browning's words, teaching was conducted amid the shouts of the teachers and the lamentations of the taught. It has grown more humane even during the last ten years. And yet, we who are seeking a better way cannot free ourselves from the contumely that has come down to us from two thousand years of cruelty to children. Though we must endure this reproach, we should not be surprised at it. Cruelty is the characteristic of the savage; loving-kindness, of the civilized man. The humane man or woman not only hates cruelty in and for itself, but despises it in the teacher as evidence of lack of skill in his calling. We cannot help despising in any calling or in any action the sub-

stitution of brute force for intellectual skill and moral influence.

Other reasons, however, there must be to account for the lack of appreciation for the teacher's position. All of them are more or less historic in their character.

The first, perhaps, is that the teacher's calling was until a comparatively recent date in the United States, and still is, in most European countries, subservient to the profession of theology. Not only have the clergy had the appointment and supervision of the teacher, but the most prominent and highly paid teaching positions have been reserved for clergymen. Public schools — tax-supported schools — are an institution of very recent growth. At the beginning of this century all schools in the United States were practically under the control of the clergy. Invariably clergymen were selected as presidents of colleges. Only two years ago a layman for the first time took his seat in the presidential chair of Yale, and only a few weeks ago did Princeton for the first time come under the direction of a president who was not a clergyman. In England, the heads of the colleges in Oxford and Cambridge and the heads of the great public schools are almost invariably in holy orders. The discussion over the education bill that has stirred England to its depths is in the last analysis nothing more or less than a fight as to whether the clergy shall appoint and control the teachers; and, unfortunately for England, the clergy for the time being appear to have won. But it can be only for a time. No profession can thrive or receive popular recognition and support while it remains subservient or subordinate to another profession. Schools in which the teachers and their interests are under

the control of clergymen can never be the best schools, because dependent teachers can never do their best work. What position would architects occupy if they were subservient to engineers, or lawyers if they were placed under the control of physicians? Yet the anomaly is scarcely greater than that once presented in this country, and still presented in England, of the dependence of the teacher on the clergyman. Teachers still suffer in public opinion because in the past they were in all things dependent on the clergy.

Only very slowly has the withdrawal of the clergy from the active management of public education resulted in greater independence for the teacher. He has been relieved of the rule of the clergy; too often he has found the thralldom of the politician. To gain place or promotion he has been obliged to pull political wires, to fawn upon men whom he despised, and to seek to obtain by influence what it was impossible to accomplish by merit. True, it is the tendency of the educational legislation of the day to deliver teachers from the serfdom of politics; but still the record of the past causes the world to look upon the teacher as the member of a dependent profession. The ignominy to which he was in the past subjected clings to him even when he has been accorded all his professional rights.

Again, lack of appreciation results from meagerness of pay and insecurity of tenure in office. Especially is this true in America, where commercialism holds far too wide a sway in every walk of life. A man with a very small salary will not as a rule wield any great amount of influence in the community, and particularly so when it is

known that at the end of a year he may be "kicked out" by some one who knows nothing about teaching, in order to make room for a successor with no higher qualifications, but with a stronger "pull" than himself. That I am not exaggerating will be seen when I state the fact that the average monthly salary paid to city elementary and high school teachers in the United States is only, according to the last Report of the United States Commissioner of Education, \$47.55 for men and \$39.17 for women, while one fourth of our teachers change their places every year. Reasonable pay and reasonable tenure of office are essential to win the respect of the community and to preserve that equanimity of mind and that self-respect which are necessary to any one who desires to render good service and to take advantage of opportunities for self-improvement.

But perhaps the strongest reason why the teaching profession, notwithstanding its importance to the state, stands so low in the public esteem is that teachers themselves have too low an estimate of their calling and of the preparation it requires. They have not as a rule realized that the aim of their work is to bring about the highest development of the individual, to secure equal opportunities for all, and to perpetuate republican institutions. They have not risen to the height of this great argument. Still less have they realized that the teacher's calling requires the most thorough scholastic and professional preparation. The prevalent feeling, to our shame be it spoken, has been that any one who knew the rudiments and could keep ahead of his pupils was good enough to teach an elementary school. Notwithstanding all that is being done by our universities

and colleges and normal schools and training schools for the professional training of teachers, the vast majority of those who are now teaching and of those who are entering the profession are still untrained.

Were the lack of public appreciation and support all that results from the causes I have enumerated — from the reputation for cruelty to children, from the dependence on the clergy or on politicians, from meager pay and uncertain tenure of office, and from the teacher's own failure to realize the importance and dignity of his calling — the consequences would be sufficiently serious. But these consequences are only a part of the evil. The greatest evil is that the teacher's efficiency and his usefulness to the community are impaired. How can a teacher introduce his pupils to their spiritual inheritance when he does not understand it himself? How can he lead the children committed to his care into habits of reverence, self-control, independence, and simple-minded devotion to duty, when he himself is dependent on another profession or on the favor of politicians? How can he inspire others with high ideals if he himself, in order to secure appointment or promotion, must resort to arts that he must despise himself for using? How can he do his best work when poverty freezes the genial current of his soul, and he does not know what will become of himself and those dependent on him at the end of the school year? Arrested efficiency is the natural and inevitable consequence to the public school if the teacher's professional standing is impaired.

By some it will be argued that much of the responsibility I have attributed to the schools and the teacher belongs to the home and the church. The first school was the

family ; and in the well-ordered home the family influence is of incalculable educational benefit. In the course of time, however, as the pressure of modern life has become heavier and social conditions have become more complex, an increasingly large part of the educational duties that once devolved upon parents has been transferred to the school ; and, as Dr. Harris has often pointed out, education, as far as it concerns intellectual development, is better carried forward in the school than in the home, because of the attrition of mind upon mind and because of the impetus to intellectual development given by coöperative work. Indeed, the very existence of public schools is public admission that the education of the home will not suffice.

And even in the field of purely ethical instruction the church has proved itself deplorably lacking. But a small percentage of our children are reached by the Sunday schools. Even if these institutions were thoroughly efficient, I should still say that it is not right, that it is not well for this nation, to relegate ethical instruction to one day in the week, and to neglect it the other six. For is not a body of ethical principles part of our spiritual inheritance, quite as much as art, or science, or literature ? And does not progress depend at least as much on the development of ethical qualities as on hoarding "the long results of time" ? But even the most obvious form of ethical instruction — knowledge of the English Bible — is not well disseminated by the churches and Sunday schools. The accurate, sympathetic knowledge of the Bible that once characterized our people is fast disappearing, and now it is a rare thing to meet a young American outside the

ecclesiastical profession who has even a superficial acquaintance with that great classic. A distinguished professor of English literature at Harvard tells me that he rarely finds a Harvard student who has the slightest appreciation of the Biblical references in Shakespeare.

If, then, the public school must be charged, as I believe it must, with the ethical as well as the intellectual training of the vast majority of American youth; and if it is admitted, as it must be, that the welfare of society and the preservation of republican institutions depend in very large measure on the intellectual and ethical training given in the schools, — surely it follows that it is the business of the state to see to it that the teacher's life is lived under such conditions that he can render society his most efficient service. •

These conditions are: (1) adequate preparation rigorously insisted upon; (2) appointment and promotion by some means that shall stimulate the teacher's efforts and preserve his self-respect; (3) opportunity for self-improvement and for the development of originality; and (4) reasonable financial support and secure tenure of office for the efficient.

* * * * *

But, suppose the state does all that I have asked for the teacher; suppose it requires adequate scholastic and professional training, appointment and promotion on merit alone, reasonable freedom in teaching, adequate opportunity for self-improvement, secure tenure of office during efficient service, living salaries and support for old age; suppose the state guarantees to the teacher all these things, what does the teacher owe to the state in return? Each

individual teacher owes to the state his greatest energy, his most devoted service, his best ability.

Individual effort, however, is not sufficient. The work before the teacher is as wide as humanity. It will never be even measurably accomplished unless teachers combine their forces and form themselves into societies for the accomplishment of common objects. When I speak of societies of teachers I do not mean trades-unions or federations of labor, because, however worthy and necessary these combinations of labor are—and I believe them to be very worthy and very necessary—their chief reliance for the amelioration of material conditions is the right to strike. This is an inalienable right, but it is a right which no teacher worthy of the name will ever exercise. The teacher's work is too sacred to permit him to leave it for his own material advancement. Poverty may come, persecution may come; the true teacher will never desert his holy mission to childhood. No possible conditions will ever justify a teachers' strike. Yet if they join a trades-union they are bound to strike when so ordered. The true solidarity of teachers is as far removed from trades-unionism as a profession is from a trade.

I mean by the solidarity of teachers organization to accomplish their high purposes under a code of professional ethics that will set a standard of professional honor and professional duty which will transcend school board ordinances and statutory enactments. Such a standard, if ever formulated, will be formulated by teachers themselves from a nice sense of honor, from loyalty to a noble profession, and from ambition to realize high ideals.

Time will permit me to indicate only a very few of the most salient features of such a code of ethics.

In the first place, the code will forbid all underbidding, all maligning, all pulling down of the reputation of fellow teachers, all effort to secure another's place.

In the second place, the code will forbid the use of political, social, or religious influence of any kind to secure appointment or promotion. At first sight, this may seem a hard saying. As long as municipal government in our large cities remains the practical failure which careful students of sociology have proclaimed it to be, I suppose it is inevitable that politics will exert a baneful influence on the public schools; school boards will reflect more or less the political opinions of the appointing power; the less worthy among the teachers will endeavor to get ahead of their fellows through "pull"; and even the more worthy in moments of weakness will sometimes in self-defense resort to the same disgraceful tactics. We may try all sorts of expedients through legislation to prevent politics entering the administration of the public schools. But such expedients, however excellent, will always remain at best partial failures until the appeal is made to the professional honor and dignity of the teachers themselves. Let it be once understood that it shall be regarded by the profession as unprofessional to seek advancement on any other ground than merit, and the difficulties of school administration will disappear like the mist before the rising sun. It should be as unprofessional for a teacher to use "pull" to secure advancement as it is for a physician to advertise in the daily press.

In the third place, the teacher's code of ethics will en-

join never-ending preparation for work. It is not enough that the state or private munificence should provide opportunities for self-improvement. It should be part of the teacher's inmost nature to embrace them with avidity when they are provided and to find them when they are not provided.

Fourth, the teacher's code of ethics will enjoin a firm belief in progress, in the possibility of modifying environment for the better. All history attests such progress. We all believe there has been progress in the past. But when we look into the life around us, it is often not so easy to believe in progress in the present or the future. We see, for instance, that every new discovery and every new invention throws wage earners for the time being out of employment, and produces acute and widespread suffering. We see the great combinations of capital crushing out the small dealer and manufacturer. We see labor and capital, as in the recent coal strike, engaged in fratricidal strife in which ten innocent persons suffer for one who is guilty. In the great centers of population and in partially deserted rural localities we find suicide, insanity, vagabondage, drunkenness, and the other various forms of vice and crime, increase, as the struggle of life, which nature has ordained as the price of progress, increases. "Barbarism is no longer at our frontiers; it lives side by side with us." Often, as we reflect on these things, it is hard not to be a pessimist. Often, as we see man's inhumanity to man, as we see the squalor and wretchedness and sin that lie all around us, it is difficult to resist the cry, "The world is growing worse and worse, and man is moving on towards destruction." But the teacher who succumbs to

this feeling, all too prevalent in our modern life, has belied his profession; like Peter, he has denied his Lord, but without the poor apology of physical terror. The teacher is the officer of the state whose duty it is to promote progress by enabling each new generation to build higher on the foundations laid by its predecessors. As the herald of progress, his first duty is to be an honest, thoroughgoing believer in what Phillips Brooks called "a great purpose underlying the world for good, for human fulfillment, which is absolutely certain to fulfill itself somewhere, somehow." This is the thought to which Tennyson has given immortal utterance in "In Memoriam": —

That God which ever lives and loves,
One God, one law, one element,
And one far off divine event
To which the whole creation moves.

The teacher who does not believe, notwithstanding all the hindrances, notwithstanding all the sin and all the strife, in the possibility of elevating the human race mentally, morally, and physically, the teacher who cannot see in his work, however humble, something that brings a shade nearer that "one far off divine event to which the whole creation moves," has no part or lot in the ethics of the teaching profession.

Fifth, the commandment to believe in progress carries with it the duty to help all who need help, and particularly children. Neither talents, nor learning, nor accomplishments will avail the teacher much unless they are devoted to the service of mankind. He should feel, as Felix Adler has said, that he is building a temple in which the lives of the pupils he trains shall be the building stones.

Sixth, and lastly, the teacher's code of ethics will enjoin him to be humane and gentle toward all children. A harsh word, a cruel look, may wound the child spirit to the death; all your powers of kindness and magnetism are required to call it into action. The ox may crush the lily into the dirt; it needs the glories of the sun of heaven to coax it into life. As a great teacher once said: "Ah, believe me, fellow teachers, where two or three children are met together, unless He who is the Spirit of Gentleness be in the midst of them, then our Latin is but sounding brass and our Greek a tinkling cymbal."

These, then, are the duties which, whether or not the state provides the conditions that shall best promote professional efficiency, the teacher owes to the state: professional courtesy to one another, a firm belief in progress and a constant striving toward helpfulness, never-ending preparation for life work, and love and gentleness toward all children.

XXXII

EDUCATION FOR EFFICIENCY

(President's Address delivered before the National Educational Association at Ocean Grove, N. J., July, 1905)

THE National Educational Association meets in its forty-fourth annual convention at the moment when Japan has given the world another great object lesson in the value of education. Ever since Napoleon's retreat from Moscow, the world has stood in awe of that massive and mysterious power which we call Russia. In that fateful campaign it was not the skill of the Russian commanders or the bravery of the Russian soldiers that wrought the catastrophe; it was the snowflakes — the arrows from the quiver of God — that overwhelmed the might of the invader. Ever since, Russia has gloried in a victory that was not of her own achieving. The world accepted her at her own valuation, and stood in awe. Wrapt in the glamour of an unearned renown, Russia pursued her aggressions practically unopposed, until her empire stretched from the Baltic Sea to the Pacific Ocean. There her career of conquest has ended. There, once again, has broken out the irrepressible conflict between ignorance and enlightenment. On the one side stands a people, almost countless in number and rich beyond knowledge in all natural wealth, but ignorant, devoid of initiative, and alienated from their rulers by despotism and cruelty. On

the other side stand the Japanese — a people limited in numbers and confined in territory, but born again through the diffusion of knowledge and through the universal training for efficiency which has made their inherited patriotism invincible.

Japan has but repeated at Port Arthur and at Mukden and on the Japan Sea the lesson of history — the lesson of Marathon, of Zama, of the Invincible Armada, of the Heights of Abraham, of Waterloo, and of Sedan ; the lesson that the race which gives its children the most effective training for life sooner or later becomes a dominant race. Borrowing eagerly from Western civilizations, Japan has adopted for her own whatever school exercise or method of teaching gives promise of training for efficiency. Nobly has she repaid her debt to Europe and America. She has demonstrated to the world that the training of the young to skill of hand, to accuracy of vision, to high physical development, to scientific knowledge, to accurate reasoning, and to practical patriotism — for these are the staples of Japanese education — is the best and cheapest defense of nations.

Such are the lessons of war. The history of peaceful industrial effort tells the same story. No nation is truly prosperous until every man has become, not merely a consumer, but a producer. As Emerson most truly said : —

A man fails to make his place good in the world unless he not only pays his debt, but also adds something to the common wealth. Efficient universal education, that makes men producers as well as consumers, is the surest guarantee of progress in the arts of peace — is the mother of national prosperity.

“But,” exclaims an objector, “this is gross materialism.” Not so. The history of the world shows that a

nation improves morally and intellectually only as its physical condition is strengthened. The futility of religious missionary effort, when unaccompanied by physical betterment, is of itself sufficient to prove the thesis. Better shelter, better food, better clothing, are the necessary antecedents and accompaniments of higher thinking, greater self-respect, and more resolute independence.

True, material prosperity too often brings with it a train of evils all its own; sensual indulgence or slothful ease, it may be; or the grasping at monopoly and "man's inhumanity to man"; or a feverish pursuit of material things, to the neglect of the spiritual. True, enormous wealth is often accompanied, particularly in crowded centers of population, by extreme poverty. These, however, are but temporary reversions to barbarism — the price we must pay for progress. The best corrective of the evils generated by the accumulation of wealth is not antitrust laws or other repressive legislation, but a system of schools which provides a training for all that is equal to the best which money can buy; which discovers and reveals genius born in low estate, and enables it to fructify for the common good; and which guarantees to every child the full development of all his powers. The trained man will demand, and will, in the long run, receive, his due share. Education is a chief cause of wealth and the most certain corrective of its abuse. In a community in which every man had been trained to his highest efficiency, monopoly and poverty would be alike impossible.

In the light of these historic truths, you will permit me, as a prelude to the addresses which are to be delivered before the meetings, general and departmental, of this convention,

to state very briefly — I do not venture to say, discuss — a few of the burning educational questions of the day.

The first of these questions is: What does "education for efficiency" mean? It does not mean that every man should be trained to be a soldier. True, the man who is well trained for the duties of peace is, in these days of scientific instruments of destruction, well prepared for war; but military prowess can never become the ideal of education among a great industrial people. It does not mean merely that each citizen should be able to read the newspapers and magazines, so that he may be familiar with political discussions, and able to make an intelligent choice between candidates and policies. The imparting of such knowledge to each individual is essential in a democratic nation, but it falls far short of the education needed to secure the highest efficiency of each unit of society. Still less does it mean that wretched travesty of education which would confine the work of the public schools to those exercises in reading, writing, and ciphering which will enable a boy or a girl, at the age of fourteen or earlier, to earn starvation wages in a store or factory. Education for efficiency means all of these things; but it means much more. It means the development of each citizen, first as an individual, and second as a member of society. It means bodies kept fit for service by appropriate exercise. It means that each student shall be taught to use his hands deftly, to observe accurately, to reason justly, to express himself clearly. It means that he shall learn "to live cleanly, happily, and helpfully, with those around him"; that he shall learn to coöperate with his fellows for far-reaching and far-distant ends; that he shall learn the everlasting

truth of the words uttered nearly two thousand years ago : " No man liveth to himself," and, " Bear ye one another's burdens." Such, I take it, is the goal of American education.

If this ideal of developing the highest individual and social efficiency of each citizen is the goal of American education, obviously the curriculum of our schools becomes an object of extreme solicitude. Particularly is this the case with the elementary schools, for these contain over ninety per cent of the children under instruction. During the last quarter of a century a great movement for the reform of the elementary curriculum has been gathering strength. The most prominent characteristics of this movement would seem to have been the development of the imagination and the higher emotions through literature and art and music ; the training of the body and the executive powers of the mind through physical training, play, and manual training ; and the introduction of the child to the sources of material wealth through the direct study of nature and of processes of manufacture. At first the movement seems to have been founded on a psychological basis. To-day the tendency is to seek a sociological foundation—to adjust the child to his environment of man and of nature.

At various times during the past ten or fifteen years, and particularly during the past year, reactionary voices have been loudly raised against the new education, and in favor of the old. Such were to be expected. Reactions follow inevitably in the wake of every reform, political and social. Analysis will show that the reactionary tendencies in education arise from three chief sources :—

1. The demagogic contentions of selfish politicians, who

see that it costs more money to teach the new subjects of the curriculum than the old, and that thus a large proportion of the public revenue is diverted from the field of political spoils. These are the men who have invented the term "fads and frills" to designate art, manual training, music, and nature study. It must be theirs to learn that it will require something more than a stupid alliteration to stem the tide of those irresistible forces that are making the modern school the faithful counterpart of the modern world and an adequate preparation for its activities. The saving common sense of the common people, when deliberately appealed to, will always come to the rescue of the schools.

2. The reactionary tendency is due in part to an extremely conservative element that still exists among the teaching force. For the most part, teachers who are still extremely conservative were themselves brought up chiefly on the dry husks of a formal curriculum. They find it difficult to learn and to teach the new subjects. They dislike to be bothered by the assistance of special teachers. Accustomed to mass work both in learning and in teaching, they regret the introduction into the schoolroom of arts which demand attention to individual pupils.

3. The reactionary tendency has its roots even among the more progressive teachers in a vague feeling of disappointment and regret that manual training, correlation, and nature study have probably not accomplished all that their enthusiastic advocates promised ten to twenty years ago.

The feeling of disappointment, we might say even of discontent, among the more thoughtful and progressive teachers, is what might have been anticipated. In the first

place, public education has become a much more difficult thing than it was half a century ago. It has become more difficult for two reasons: —

1. Because of the constantly increasing migration of population from the country to the cities. Children removed from rustic to urban life lose that most valuable education which comes from the work and the associations of the farmyard and the fields.

2. Because of the enormous increase in immigration from abroad, and particularly because the character of the immigration has changed. Up to the middle of the last century the majority of our immigrants were of kindred blood with the American people, and a large proportion spoke our language. Gradually, however, the tide of immigration, while swelling until it has now reached the enormous total of one million a year, has shifted its chief sources from the shores of the North and the Baltic seas to the shores of the Mediterranean. The peoples of southern Europe, illiterate, accustomed to tyranny, without individual initiative, and habituated to a low standard of living, huddle themselves together in our large cities and factory towns under conditions inimical alike to morals, to physical well-being, and to intellectual advancement. Teachers have a good right to complain that municipal authorities, in permitting the overcrowding of immigrants in unsanitary quarters, have aided the establishment of the most serious obstacle yet discovered to the upward progress of public education.

In the second place, the feeling of disappointment with the results of the newer studies arises from the fact that these studies were introduced before the teachers were

prepared to teach them; that for too long they were concerned chiefly with uninteresting formal processes rather than with interesting results; that they were not related to real needs of school and home, and were not properly coordinated with other phases of the curriculum. Much yet remains to be done to assimilate the environment of the school to the environment of the world.

And yet, while we may feel discontented with the situation, and regret the increased difficulties of our work, there is no reason for discouragement. I have no hesitation in saying that in general intelligence, in all-round efficiency, in power of initiative, the pupils whom I now see are superior to those of a quarter of a century ago. If the obstacles before us are more formidable, if the problems are more complicated than those presented to our predecessors, the teachers of America are better organized and better equipped to overcome the obstacles and to solve the problems. He who has sailed in a modern steamship through an ocean storm has seen the mighty vessel cleave the billows and scarcely slacken her speed in the teeth of a hurricane. Down in the depths of the ship men are piling coal on the furnaces and releasing a force — the imprisoned sun power of uncounted ages — that baffles the waves and defies the whirlwind. And so it is with our ship of state. Come what storms of ignorance or wickedness there may, teachers are supplying the fuel of knowledge and releasing the force of intelligence that will hold our nation in the straight course of progress.

And yet, the teachers of America are still far from satisfied with their achievements. They are dissatisfied with the elementary curriculum, because it seems crowded with

the new studies that have been added without diminishing the number of the old. They are dissatisfied with the high school curriculum, because the old-style language, mathematics, and science course, however suitable it may be for admission to college, does not precisely meet the needs of boys and girls who are going directly into life. They are dissatisfied with the specialized high school, because it seems lacking in some of those attributes of culture in which the old-time school was strong. And they are dissatisfied with the college course, because the elective system, which has taken the place of the old prescribed course, does not seem to give a strong, intellectual fiber to the weaker students who, too often, follow the path of least resistance. And they are dissatisfied because there is less intelligence, less efficiency, and less helpfulness in the world than the world needs. So far from feeling concerned at this widespread discontent, we should rejoice that it exists. There is nothing so blighting to educational enthusiasm as smug satisfaction with what is or what has been; there is nothing so stimulating to educational effort as a realizing sense of present imperfections and of higher possibilities.

As to the curriculum of the higher schools and colleges, the problem is really, not what studies shall be inserted and what omitted, but how shall we make it possible for the student to get that culture, efficiency, and power out of his studies which his development requires. This is really a question for psychology to answer. Well may we ask of our universities, with their psychological laboratories and their sensitive apparatus for measuring mental reactions: Will psychology ever accomplish what phrenology once promised,

but has never performed — the determination of a young student's capabilities and of the line of work he ought to pursue ?

As to the elementary curriculum, surely we shall not go far wrong if we apply to each study, and even to each detail of each study, these four questions : —

1. Is this study or this exercise well within the comprehension of the child ?

2. Does it help to adjust him to the material and the spiritual environment of the age and of the community in which he lives ?

3. Does it combine with the other studies of the curriculum to render him more efficient in conquering nature and in getting along with his fellows, and thus to realize ideals that transcend environment ?

4. Does it accomplish these objects better than any other study that might be selected for these purposes ?

If these questions are answered in the affirmative, we may reasonably conclude that the study or the exercise in question is an important element in education for efficiency. Examined from the viewpoint established by these questions, every study will assume an aspect very different from that which it bears when taught without a well-defined object. Take drawing, for example. Drawing may be so taught as not only to lay bare to seeing eyes new worlds of beauty, but to lead to that reverent appreciation of nature, and the reapplication of her lessons to daily industrial art, which is the way, as Ruskin has said, in which the soul can most truly and wholesomely develop essential religion.

Again, take the teaching of agriculture. While our soil seemed inexhaustible in fertility as in extent, the need of

such teaching was not felt. Now, however, we are obliged to have recourse to lands that produce only under irrigation. The rural schools have added to our difficulties by teaching their pupils only what seemed most necessary for success when they should move to the city. The farms of New England are, in large measure, deserted or are passing into alien hands. To retain the country boy on the land, and to keep our soil from exhaustion, it is high time that all our rural schools turned their attention, as some of them have done, to scientific agriculture. There is no study of greater importance; there is none more entertaining. If every country boy could become, according to his ability, a Burbank, increasing the yield of the fruit tree, the grain field, and the cotton plantation, producing food and clothing where before there was only waste, what riches would be added to our country, what happiness would be infused into life! To obtain one plant that will metamorphose the field or the garden, ten thousand plants must be grown and destroyed. To find one Burbank, ten thousand boys must be trained; but, unlike the plants, all the boys will have been benefited. The gain to the nation would be incalculable. Scientific agriculture, practically taught, is as necessary for the rural school as is manual training for the city school.

Nor are our people going to rest satisfied with mere manual training. The Moseley commissioners pointed out that the great defect in American education is the absence of trade schools. Trade schools will inevitably come. The sooner, the better. They are demanded for individual and social efficiency.

It is not in secondary schools alone, however, that

efficiency demands highly differentiated types of schools. It is absurd to place the boy or girl, ten or twelve years of age, just landed from Italy, who cannot read a word in his own language or speak a word of English, in the same class with American boys and girls five or six years old. For a time, at least, the foreigners require to be segregated and to receive special treatment. Again, the studies that appeal to the normal boy only disgust the confirmed truant or the embryo criminal. Yet again, the mentally defective, the crippled, and the physically weak children require special treatment. Unless all indications fail, the demand for education for efficiency will lead in all our large cities to the organization of many widely differentiated types of elementary school.

The problem of the curriculum, important as it is, is less important than the problem of the teacher. The born teacher—that is, the man or woman who has a genius for teaching—will teach well, in spite of any curriculum, however bad. Unfortunately, genius is as rare in the profession of teaching as it is in law, or medicine, or any other profession. The great majority of us, as it needs must be, are very commonplace persons, who are seeking for light and doing the best we can. Hence, the supreme importance of training. And yet there is no part of our work to which so little thought and investigation have been given. Normal schools in this country are still very young—only a little over half a century old. The first normal schools were high schools with a little pedagogy thrown in. The majority of them remain the same to this day. There is a strong movement, however, toward purely professional schools to which no student who has not had a reasonably

liberal education is admitted, and in which he shall devote his entire time to learning how to teach — how to observe, understand, and exercise children both mentally and physically. Welcome and necessary as this movement is, if all teachers are to train for efficiency, we are still far from precise scientific notions as to the best methods of training teachers. I commend this subject to the National Council as one of the next investigations it should undertake.

To secure training for efficiency, the conditions of teaching must be such that each teacher shall be able to do his best work. By common consent, one of these conditions is that teachers shall not be subjected to the ignominy of seeking political or other influence, or cringing for the favor of any man, in order to secure appointment or promotion. During the past year two events have occurred which seem to be full of promise for the establishment of this condition. The public school teachers of Philadelphia have been freed from the bondage toward politicians in which they were held for well-nigh a century ; and the one-man power, beneficent as such a system proved under a Draper and a Jones in Cleveland, has been supplanted by an apparently more rational system. Independence of thought and freedom of initiative are necessary to the teachers of a nation whose stability and welfare as a republic depend upon the independence, the intelligence, and the free initiative of its citizens. Independence of thought and freedom of initiative may be throttled by bad laws, but under the best laws they will be maintained only by the teachers themselves. By making it unprofessional to seek appointment or promotion through social, religious, or political influence, the teachers of this country have it in

their power to establish one of the most essential conditions of education for efficiency.

Under the conditions that confront us, particularly in the large cities, with the rapid increase and constant migration of our home population, with the influx of vast hordes of people from abroad, alien in language, alien in modes of thought, and alien in tradition, the character of our elementary work is undergoing a profound transformation. We are beginning to see that every school should be a model of good housekeeping and a model of good government through coöperative management. What more may the schools do? They can provide knowledge and intellectual entertainment for adults as well as for children. They can keep their doors open summer as well as winter, evening as well as morning. They can make all welcome for reading, for instruction, for social intercourse, and for recreation. But I for one believe they may do still more. When I look upon the anæmic faces and undeveloped bodies that mark so many of the children of the tenements; when I read of the terrible ravages of tuberculosis in the same quarters, I cannot but think that the city should provide wholesome food for children at the lowest possible cost in public school kitchens. To lay the legal burden of learning upon children whose blood is impoverished and whose digestion is impaired by insufficient or unwholesome feeding is not in accord with the boasted altruism of an advanced civilization or with the divine command, "Feed the hungry." Is this not also a subject for investigation by our National Council?

And should it some day come to pass that men will look upon corruption in public and corporate life, such as of

late we have seen exposed in New York, Philadelphia, and St. Louis, with the same loathing with which they regard crime in private life, it will be when the schools are in earnest about teaching our young people the fundamental laws of ethics, that —

The ten commandments will not budge,
And stealing still continues stealing.

But economic perils and racial differences are the teacher's opportunity. Here in this country are gathered the sons and the daughters of all nations. Ours is the task, not merely of teaching them our language and respect for our laws, but of imbuing them with the spirit of self-direction, our precious inheritance from the Puritans; the spirit of initiative, which comes to us from the pioneers who subdued a continent to the uses of mankind;¹ and the spirit of coöperation which is symbolized by, and embodied in, the everlasting union of sovereign states to promote the common weal. And as, in my own city, I see the eagerness of foreigners to learn, and the skill and devotion of our teachers, I cannot but think that we are overcoming our almost insurmountable difficulties.

There is, perhaps, no more striking moment in all history than that at which the apostle Paul, standing on Mars Hill and pointing to the blue Ægean, the center of the then known world, proclaimed the new but eternal doctrine, "God hath made of *one* every nation of men for to dwell on all the face of the earth." Standing here, as we do, on the border of the Atlantic Ocean, and beholding, on the one side, the dove of peace alighting from the hand of our President on the fields of carnage in the Far East, and, on

¹ Münsterberg, "The Americans," Chaps. I and II.

the other side, the homes of people of all nationalities stretching from the Atlantic to the isles of the Pacific, under the protection of the American flag, may we not realize that we, as teachers, have a great part to perform in bringing a vast company to an understanding of the sublime truth that God has made all men *one* to dwell on the face of the earth ; that their mission is not to defraud and to slay, but each to do his best for himself and to help his fellows ?

XXXIII

THE ECONOMICAL USE OF SCHOOL BUILDINGS

(A paper read before the National Council of Education, July, 1910)

THAT a public school building may be used economically, it ought to be used all the time — summer and winter, morning, afternoon, and evening — and it ought to be used for the greatest benefit to the greatest number of people. Otherwise a large part of the people's investment in the building is wasted. To use a school building only from nine to three, five days in the week, nine months in the year — in other words, to allow it to remain unused more than one half the working year — is not only to waste the people's money, but to deprive of the benefits of its use many thousands of persons of all ages who might otherwise take advantage of them.

It is evident, however, that a building which consists of a cellar, corridors, and rooms furnished with children's seats and desks fastened to the floor may be conveniently used for but one purpose — the conduct of school recitations. If a school building is to be used for social and recreative purposes, even if it is to be used economically for the purposes of a modern school, it should be constructed and furnished very differently from the prevailing type of schoolhouse.

In all of this discussion two considerations are, I think, self-evident:—

1. The schoolhouse is intended primarily for children. If, therefore, there comes a conflict between the interests of children and the interests of adults in planning the building, the interests of the children must prevail.

2. Children are entitled to time and opportunity for play—the natural means of development for the young of the human species, as it is for the young of all animals.

My first proposition, then, is that every schoolhouse should have abundant play space. I need not dwell on the importance of providing large out-of-door playgrounds. These are of the greatest service when they are fully equipped and rightly used. When, however, they are laid out in grass and flowers, as is the case in many of our smaller cities and villages, they are more ornamental than useful. Happily, school gardening is coming into vogue and is rapidly converting sham playgrounds into real playgrounds. But the outdoor playground, no matter how it may be used, is not sufficient. It is not used on excessively hot days. It is not used on very cold days. It is not used at night. It is not used when it rains or when it snows. Under the best conditions, it is used less than one half the days of the school year. By the erection of suitable shelters it might be used much more than it is. In any case, however, it should be supplemented by a large indoor or covered playground. In New York, where the cost of sites is so high as to prohibit the purchase of much more land than that on which the building stands, we utilize practically the whole of the ground floor as an indoor playground. This large room is kept heated in winter to about fifty degrees. It has large folding doors and abundant window space, so that there may always be a free cir-

culatation of air. Its walls, floor, and ceiling are given a light and cheerful finish, so that it may not offend the æsthetic feelings. Permanent benches are constructed round the walls, so that tired children may have somewhere to rest. It is equipped with the usual gymnasium outfit — wands, clubs, dumb bells, jumping mats, bars, and horses. A small movable platform for the use of teachers or speakers adds greatly to the number of uses to which the room may be put. By all means let us have outdoor playgrounds if we can, but whether we can or not, every school should be provided with an indoor playground. Its advantages are : —

(a) It can be used in all weathers, at all seasons of the year, at all hours of the day or evening.

(b) Where a school is so crowded that, as is often the case in New York, two classes must occupy the same room at different hours, one class may be having, in the covered playground, games or folk dancing, or calisthenics, while the other class is reciting.

(c) The covered playground solves the problem of a place in which to provide recreative space for young working people on winter evenings. It may be made so attractive as to draw girls from dance halls and young men from saloons.

In New York in the densely populated parts, where an outdoor playground is impossible on account of the cost, we have solved the problem by constructing playgrounds on the roof. Such roof playgrounds are now rendered feasible through modern methods of fireproof construction. The floor of the playground, which is also the roof of the building, is constructed of vitrified tile or brick. Abundant entrances and exits, toilet facilities, and drinking water are provided. A parapet wall three or four feet high surrounds the roof, while the top and sides are inclosed by a wire

netting stretched over steel trusses, to prevent the throwing of injurious missiles into the surrounding streets. Such a playground on the roof may be used not only for ordinary play purposes, but for band concerts and dancing on summer nights.

A schoolhouse should be equipped not only with playgrounds, but with an assembly room that will accommodate at least one third of the school at one time, and with shops and cooking rooms for manual training in the case of the older children.

In order that an assembly room may be used, as it should be, for lectures, concerts, and other entertainments, as well as for ordinary school purposes, it should be placed not higher than the first classroom floor and may be placed, if the configuration of the ground permits, below the level of the street, its roof constructed largely of glass, forming the floor of an interior court. Its seats should be such that it may be used not only by the smaller children, but by adults. Benches should be discarded, because they are uncomfortable and do not conform to the now universally accepted plan of radial aisles. Proper provision should also be made for the use of a stereopticon and screen. Electrical conduits and wiring should be brought to a central point at the rear of the room, never to the center, so as to avoid annoyance to the audience by the operation of the lantern. The screen, which when hung from the ceiling generally presents an untidy appearance, should be placed in a pocket in the floor of the platform, from which it may be raised by means of a pulley, and to which it may be restored when not in use. The stage itself should be furnished with side entrances, curtains at the front, and

footlights, to permit of dramatic performances. Every schoolhouse should be a children's theater.

Even the classroom should be planned with a view to its use for other than strictly school purposes. Much difference of opinion continues to exist regarding the size of classrooms. Doubtless a very large classroom — one, say, twenty-six by thirty-two feet — serves social purposes better than a smaller room. In spite of this fact, however, I must give my allegiance to the smaller room, say the German standard of twenty-two by thirty feet. My reasons are: —

(a) The smaller room conserves both teachers' and pupils' energy, because less effort is required in the use of the voice in a room of nine thousand cubic feet capacity than in one of twelve thousand cubic feet.

(b) The smaller room admits of perfect lighting while using only one side of the room for windows, because the innermost row of desks is brought well within the limit of proper lighting, which is conceded to be one and one half the height of the top of the windows from the floor. In the larger room windows are generally formed in the side and rear — an arrangement which compels the teacher to face the light.

The important consideration, however, to render a classroom appropriate for social as well as school purposes, is not the size of the room so much as its furniture. As classrooms are now furnished with seats and desks fastened to the floor, they serve only the school purposes of reading, writing, and listening. The seats are too small for adults. The desks are not suitable for drawing or manual training. There is no reform in school construction more needed today than the destruction of the fixed seat and desk and the substitution of movable tables and chairs. The advantages of the latter are these: —

(a) Movable furniture is more wholesome, because it permits the removal of all dirt and dust from the floor.

(b) It can be better arranged by the teacher either for class exercises or for group exercises.

(c) The tables serve better for manual training and drawing exercises.

(d) By proper disposition of the furniture every classroom may become at will a recitation room, a game room, a dancing floor, a gymnasium.

(e) Each room may be freely used in the afternoon or evening for club or other social purposes.

There is only one other reform in school construction comparable in utility with the substitution of movable for fixed furniture, and that is the invention of a system of artificial ventilation that will supply thirty cubic feet of fresh air per pupil per minute, and that will work in all weathers, in all rooms, and whether the windows are open or closed.

Recent medical research and experimentation show that breathing pure air, night and day, is the most potent means of curing and preventing tuberculosis—the plague of modern civilization. The schools have properly been called upon to do their part in this all-important work. Started in Germany, the open-air class has also been tried with beneficial results in several European countries. The first class of the kind in America was established by the New York Board of Education in 1904 on the seashore at Coney Island, in connection with a charitable institution. For this purpose the roofs of buildings, schoolyards, meadows, parks, and, as in New York, old ferryboats, have been utilized. It begins to be evident, however, that, sooner or later, the demand for open-air classes will become so great that it will be necessary to construct our school buildings in such a manner that each room shall have at least one of the inclosing sides arranged to admit a practically unimpeded circulation of air. The most satisfactory arrangement thus far devised is the use of glass set in comparatively

small frames, supported on pivots and operated by levers and gears, so that it may be placed at will in nearly a horizontal position, so that 95 per cent of the lighting will also be air-admitting surface. A room with windows of this kind has been found in New York to be practically an open-air room. There can be no more economical use of a school building than to use it for restoring strength to the weak and health to the sick.

Suppose, then, we have a building constructed for the largest possible number of uses — a building with an assembly room, large indoor playgrounds, gymnasium, workshops, cooking rooms, and with each classroom furnished with movable furniture — what are the activities, other than regular day school, that may profitably be undertaken?

First, there are evening schools. Evening schools, however, have not been economically managed. The attendance is almost invariably small — from 20 to 40 per cent of the enrollment. The suggestion has been made — and I understand the experiment has been successfully tried — that a small deposit of money should be required from each student. I am inclined to think, however, that at least in the case of one large class of evening school students — those who leave school at fourteen without having completed the elementary school course — the evening school from eight to ten o'clock is not an efficient institution. No boy of these tender years should be expected, after working all day, to give up his evenings to study. In my judgment, the state should retain its hold on each child until he completes at least the eight years' elementary course. If an employer takes into his service the child who leaves school with no proper equipment for fighting the battle of life in

these days of dire competition, the state should see to it that the time required for giving him a moiety of that equipment should be taken, not out of the child's hours for rest and recreation, but out of the employer's hours for labor. I recommend, therefore, that classes be established from 7 to 9 A.M. and from 4 to 8 P.M. for working boys and girls who did not complete the eight years' elementary school course before going to work, and that our compulsory education laws be so amended as to make such a rule effective.

Another large class of evening school students consists of adult foreigners who come to learn the English language. In New York City the foreign classes — running from the middle of October until the middle of April — have always been successful. This year, however, we are trying an experiment which bids fair to surpass all of our previous efforts along this line. During the summer months we have opened an evening school for foreigners. The attendance and enthusiasm of the students surpass all our anticipations. Should the attendance keep up during July and August, it is safe to say that this summer evening school is only the precursor of a great system of such schools — another means of economically using school buildings for the benefit of the largest possible number of persons.

In evening lectures to the people the school assembly room, or, in default of an assembly room, the large indoor playground, may be utilized from October until May. From May until cool weather comes again, no one who is not a teacher will endure a lecture. The experience of our New York lecture bureau is that the best lectures and lecturers are none too good for the plain working people

who frequent our assembly rooms ; and that, while the lecture illustrated by the stereopticon or relieved by music is still the most popular, the scientific, the literary, and the historical lectures given in courses in which the hearer may question the lecturer and which are accompanied by lists of books for reading, are attracting increasingly large audiences of intelligent students. Last season public lectures in the New York schools were delivered by six hundred and forty-one lecturers in one hundred and sixty-nine centers, to audiences aggregating 1,213,116 people.

Akin to the use of the assembly room or covered playground for lectures is their use for special celebrations. On February 12, 1909, the one hundredth anniversary of the birth of Abraham Lincoln was celebrated in New York, among other ways, by the delivery of forty-six lectures on Lincoln by prominent citizens in forty-six school buildings to audiences aggregating 65,249 people. On September 29, 1909, the three hundredth anniversary of the discovery of the Hudson River by Henry Hudson, and the one hundredth anniversary of the successful application of steam to navigation by Robert Fulton, were celebrated by the delivery of seventy-six addresses by members of the teaching and supervising staff in seventy-six school buildings, to audiences aggregating 71,055 people.

There is a large class of young working people who do not attend evening school, and who, if some other provision is not made for them, drift into the saloons, dance halls, and moving picture shows. For these we have opened in New York evening recreation centers. For these activities we utilize chiefly the indoor playgrounds, but also many classrooms. The playground is divided

into two parts by folding doors. One part is used for quiet games and reading. The other is used for gymnastics in the case of boys, and folk dancing in the case of girls. Classrooms are assigned to debating, literary, and athletic clubs, whose members not only acquire information but learn how to speak in public and learn the necessity for order, decorum, and dignity in their deliberations. A recent addition to this activity is the establishment of study-rooms for children who have no proper place to study their lessons at home. A single story will suffice to show their usefulness. About a year ago a little girl was found to be extremely slow and backward and apparently quite unable to keep up with her grade in which she had already spent more than twice the allotted time. Investigation showed that she was a member of a large family in which English was not the family language and which occupied two rooms in a tenement house. For the poor child, reading and speaking English at home were out of the question. A kindly friend led her to the study-room in the neighboring recreation center. There a skillful teacher showed her how to study and helped her over her difficulties. On the next promotion day she was promoted, and by last February she had progressed so rapidly that she was advanced two grades.

Another innovation in our evening recreation centers is the permission given to the young women in the girls' centers to invite their young men friends to a dance one evening each week. This experiment, conducted under the watchful eyes of skilled supervisors, has been completely successful. Only by setting up legitimate attractions in our school buildings for the leisure hours of our

young working people can we hope to keep them away from those city pleasures, run for profit, that lure our boys and girls to the very mouth of hell.

How shall we utilize our school buildings during the long summer vacation? In New York we have established vacation schools in the forenoon, and vacation playgrounds in the afternoon and evening. The vacation schools give instruction in drawing and carpentry, Venetian ironwork, chair caning, and other arts for boys, and cooking, sewing, dressmaking, fancy work, and nursing for girls. Kindergartens are conducted for the little ones. Perhaps the most enthusiastic classes, however, are the continuation classes, intended for children who failed of promotion in the day schools in June.

Vacation playgrounds are established this year in two hundred and forty centers. About fifty of them are reserved for the tenement mothers and their babies. They are frequented by many of the real mothers and by thousands of the "little mothers." The roof playgrounds are thronged every night by children who eagerly climb five or six long flights of stairs to escape from the heat and the fetid odors of the street, to listen to the music of a band, or to dance and sing to their hearts' content in the cooler, purer air of the roof. Last summer the average attendance in these playgrounds was over 110,000 per day.

Such are the out-of-school activities conducted by the Board of Education at public expense in public school premises in Greater New York. What other activities might be conducted to utilize these premises to the fullest extent and for the benefit of the largest possible number of people? I believe the following would be successful:—

1. Each high school should be kept open practically all summer for the benefit of those students who failed of promotion in June, and of those who desire to complete the course in less than the prescribed four years. Cleveland has set us an excellent example by keeping her technical high school open the year round.

2. Every school playground and gymnasium, indoors and out-of-doors, should be kept open every afternoon throughout the year under the direction of skilled attendants.

3. Every workshop and cooking room should be open for instruction each school-day afternoon and on Saturday morning. Only in this way can sufficient eye and hand training be given to all the boys and girls who need it. The attempt now advocated in some quarters to separate manual training from industrial training will prove a dismal failure. Manual training is the legitimate introduction to learning a trade. It is only through manual training that we are able to discover those who have aptitudes for mechanical pursuits.

In conclusion, there are two conditions which, I believe, experience has demonstrated are essential to the success of any activities undertaken in school premises outside of school hours:—

1. The activities should be under the direction of the school authorities and should be supported at public expense. No other agency has the means to conduct them on a sufficiently large scale. No other agency has the staying power to conduct necessary experiments over a series of years in order to determine a policy. No other agency has the power to secure the essential coöperation of the day school staff with those responsible for the outside work. No other agency is so likely to keep the playgrounds clear of their most insidious foe—political influence in the appointment of the directors.

2. It is not buildings or equipment that make a playground successful, but the persons in charge. If the director and his assistants do not sympathize with children, if they are not resourceful and inventive, if they cannot

play all children's games and guide children in gymnastics and athletics, if they have not the executive ability to vary the activities, so that physical exertion, repose, and recreative work have their proper time and rotation, the playground, no matter what its appointments or resources, will be a comparative failure. City children must be taught how to play.

As a corollary to the second condition it follows that all normal schools and training schools for teachers should instruct our future teachers in the teaching of gymnastics, athletics, and games.

XXXIV

THE PERSONAL POWER OF THE TEACHER IN PUBLIC SCHOOL WORK

(An address delivered before the National Educational Association in Cleveland, Ohio, 1908)

ONE day not long ago in the very heart of the tenement-house region, in what is known as the Lower East Side of New York, a young woman, who had just left the large school of which she is principal, was slowly picking her way through the crowded street. Her progress was slow, for the sidewalks were crowded with people, and the street, except a small driveway in the center, was filled with the pushcarts of peddlers. To an observer it would have been at once apparent that the young woman was a person of great consequence in that Yiddish-speaking crowd, for the children's faces were glad when they saw her, and the large boys touched their caps, and not a few of the long-bearded men standing beside the pushcarts greeted her with, "Good afternoon, Miss K." Presently a woman of rather better appearance than the rest, stepped alongside of Miss K. and began to walk with her. With the unmistakable Yiddish accent she exclaimed, laying a respectful hand on Miss K.'s arm:—

I cannot help seeing how these children, they love you. You know my Bennie and Rosie? They're in your school. You are such a help to me at

home. Sometime Bennie, he say he won't. Then he quick stop and he say: "All right, mamma. Miss K. says it is right that I should obey." Do you know, lady, when you stand on that platform in the school and you say something, it is just like when God speaks.

Whether it is because of the repression that existed in the foreign lands from which they are gathered, or because of the racial sadness that seems to have been their heritage since they wept by the waters of Babylon, there is no class of people who do so much honor to the teacher, particularly if she is one not of their own race, as do the Jews.

Some twenty-five years ago a man became principal of a school in what was then one of the lowest slums of New York. It was in the days before tenement-house reform, and the abodes from which his pupils came were as a rule devoid of those necessities of life—fresh air, light, sufficient space, and sanitary arrangements. The district was crowded with saloons of the lowest class, and along the river front were scores of dives frequented by sailors and those who profited by their weaknesses. It was also in the days before the law required that all teachers should be trained and that appointment should be made for merit alone. And so the school, like its neighborhood, was in sorry condition, with a weak corps of teachers, for had not every one of them been a political appointment? The new principal, however, was not only a man of great force of character, but he had had a broad college and university training. Before the year was out he had routed the politicians, and ever afterward not an appointment was made in his school except on his recommendation. How did he do it? Not by letters to the newspapers, not by denunciation of the politicians, not by lifting up his voice in

lamentation over the degeneracy of the times, but by the simplest course imaginable — he so won the respect of the community that the politicians did not dare to interfere with his school, and soon they were all helping him. Instead of asking for the appointment of their sisters and their cousins and their aunts as teachers, they began to “acquire merit” by offering medals to the pupils for proficiency and by raising money to help along students who, the principal said, had the brains to study in higher institutions. He was a constant visitor in the wretched homes of his pupils. He was a familiar figure in every street and alley. Careless, negligent parents he threatened or cajoled. He found the means to clothe the child who was naked and feed the child who was hungry. He found employment after school hours for those who could continue in school in no other way. He discovered that so-called athletic clubs were hiring the larger boys in his school to pummel each other into insensibility in the presence of hundreds of brutalized men; but it took only one visit from him to each club to break it up. When with figure drawn up to its full height, tense muscles, and the stern voice of command, he invoked the terrors of the law if any pupil of his was ever entered again in a boxing bout, there was not a ruffian in the gang who was not cowed. He saw that there were children to whom books did not appeal, and for them he devised hand work. He was, I believe, the first man in the United States to introduce genuine manual training into an elementary school. His school became, as every public school ought to be, not merely a place of learning, but a social center from which uplifting influences constantly radiated. To-day in the

humble lives of the laborer and the artisan, in the walks of business and politics, in the ranks of the lawyers, the doctors, the teachers, and the clergymen, there are thousands who attribute their success in life to the school-master, Henry O'Neil.

I have cited these two cases in order to bring before your minds the peculiar conditions under which teaching in New York City must be conducted.

The first of these conditions is our vast foreign population. There are more Jews in New York than in Palestine, more Italians than in Rome, and enough foreigners of other nationalities to make a city as big as St. Louis. Of the 75,000 new pupils who enter the New York schools every year, probably two thirds cannot speak a word of English. In one school I counted children of twenty-nine different nationalities who spoke twenty-nine different languages or dialects. To the other difficulties of school work, must, therefore, be added this, that to the majority of pupils the English language must be taught as a foreign language.

The second condition peculiar to New York is the extreme congestion of population in parts of Manhattan Island and Brooklyn. In certain large sections the population is the densest in the world, rising as high as 1000 persons to the acre. They live, on account of extremely high rents, in enormous tenement houses; as many as forty families — and the families are always large — under one roof. A low plane of living, proneness to disease, particularly tuberculosis, and the absence of domestic privacy, are the necessary consequences. From these tenements the children, often insufficiently or improperly

fed, weary through lack of sleep, with their nerves on edge, come to the public schools.

The third condition, peculiar to New York, is the constant shifting of population. In the tenement districts, because of the continuous migration of families, a child seldom spends all of its school years in one school, generally not more than one or two years.

Of course, out of 15,000 classes there are thousands in which the ordinary conditions of school life are to be found ; but in other centers, the vast foreign population, the congestion of population, and the shifting of population, create conditions of difficulty for the teacher such as are not to be found in the same degree in any other quarter of the globe.

In other words, the New York City teachers are confronted with the difficulty not only of teaching an enormous mass of children — there are 600,000 pupils in the city schools — but of converting, under the most difficult conditions possible, a great horde of foreigners chiefly from the shores of the Mediterranean Sea, alien in language, alien in thought, alien in habits, into loyal American citizens. To supplement the work of the day schools the Board of Education has established several other agencies — evening schools, evening recreation centers, vacation schools and playgrounds, lectures to working men and women, and organized athletic sports — all of which are doing their part vigorously and well ; but it is on the regular day schools — elementary and high — our two city colleges and our training schools for teachers that the chief reliance must be placed.

The first difficulty with which we are confronted is that of teaching each year tens of thousands of foreign-born

children the English language. For such children we have organized hundreds of special classes, in which English is taught by the Gouin method of teaching a foreign language. I often marvel at the quickness with which, in these special classes, our teachers manage to teach our little immigrants to speak and read and write English. In six months after landing on our docks it is no uncommon thing to find little Russians or Italians able to do all the work of the school, declaiming with tremendous fervor Patrick Henry's apostrophe to liberty or telling in their compositions about the day when their forefathers landed on Plymouth Rock. Some teachers, however, have a more wonderful gift than others in teaching foreign children English. One such teacher I have in mind. In her class children coming from homes of the most squalid surroundings, without a vestige of loveliness, surprise us with the beauty of their thought and expression. One day the principal, the Miss K. of whom I have already spoken, entered this teacher's class—a fifth-year class—and asked the children to write down any thoughts suggested by anything they had learned that day. Here is what one of them, a Russian girl, wrote: "The sky is like the ocean because on a bright summer's day the clouds in it are like white ships. It is like the land, also, for the clouds sometimes seem like splendid castles." Such a teacher is not merely skillful in the ordinary sense of the term. Those children who come under the spell of her enthusiasm carry away some touch of poetic radiance on their souls.

An even greater difficulty is presented by life in the tenements. Sometimes this life is one of extreme poverty; but extreme poverty, except during a period of trade sus-

pension when men are thrown out of employment in large numbers, is the exception rather than the rule. Where extreme poverty does exist, I need scarcely tell you that the teachers, out of their own slender earnings, are the first to come to the rescue.

Even when the income of the family is considerable, it is too often ignorantly and unwisely used or inordinately hoarded. The mother generally works as well as the father, and too often the children before and after school hours are left to shift for themselves. They come to school wrongly rather than insufficiently fed, though insufficient feeding is no uncommon thing at all times and especially in such a year as this when employment has been hard to find and the children of the poor have been crying bitterly. The principals and teachers have been untiring in providing relief for cases of extreme and sometimes, I am afraid, of pretended distress. But the evil is too great for individual effort to cope with. Malnutrition among the children of our large cities — the prolific cause of disease — a chief reason for lack of progress in school — the fruitful source of intemperance and crime in after years — cries aloud in the name of humanity for relief. The plain fact is that the child who is improperly fed or insufficiently fed cannot do its school work and cannot control its instinctive impulses. To relieve this great suffering, to cure this great evil, it is not necessary that boards of education should provide food without price; it is necessary only that they should provide wholesome, well-cooked food at cost price.

While we are waiting for this — perhaps the most pressing of all school reforms — the teachers are doing what they can to remedy the disease wrought by the tenement house

life — a life of crowded quarters, of bad air, bad light, and insufficient sleep. Our medical inspection, being provided by the Department of Health and in no degree under the control of the Board of Education, is quite inadequate. The principals and teachers are untiring in their efforts to induce parents to have remediable defects discovered by the examining physicians corrected; such as myopia and that most prevalent cause of disorder and so-called incorrigibility — adenoid growths in the throat. Only in about 25 per cent of the cases, however, do the parents pay any attention to the request of the teachers. Some two years ago we had a remarkable experience which will illustrate the difficulties of this work among a crowded, ignorant, prejudiced, and highly excitable people. In a school in the Lower East Side there were collected a large number of over-age and mentally defective children. A medical examination showed that one hundred and fifty of them were suffering from adenoid growths in the throat. In the case of seventy, the parents had the necessary operation performed. In the case of eighty, the parents either refused or neglected. The principal obtained the consent of these parents to have the operations performed in school. She secured the services of one of the most famous throat specialists in the country. The operations were successfully performed. Almost instantly a rumor flew like lightning through the neighborhood that the children's throats were being cut. Frenzied mothers and fathers by the thousand besieged the school. For several days if a Health Board physician appeared in the neighborhood of a public school in the ghetto it was the signal for a mob to storm the gates of the schoolhouse. Thorough discipline withstood these attacks, just as it has

preserved the children's lives in many a serious alarm of fire. The steadiness, good temper, and tact of principals and teachers bore down and calmed the frenzy of the mob—another manifestation of the personality required of the teacher in the New York City schools.

Our courses in sewing and domestic science are doing much not only for individual pupils, but to introduce order, economy, and an American plane of living into the home. The good offices of the teachers in this respect are not confined, however, to the teachers of sewing and cooking, as the following story will show.

Mr. Y. had among his pupils a boy about thirteen years of age who was quite irregular in attendance, though a fairly good student. As the boy gave no satisfactory explanation of his irregularity, the teacher called on the boy's parents and found that they were living in two or three rooms of a miserable tenement. The father, a tailor by trade, was out of work, the mother was sick in bed, and there were four children, of whom two were cripples. The rent had not been paid, and the family were on the point of being evicted from the wretched lodgings. The father, who was too proud to appeal to charity, had trudged about the city for many days in search of work, but always in vain. He kept the boy, who was the oldest of the family, home to look after the other children and the invalid mother; besides, the boy had no proper clothing to wear, especially in inclement weather. To make a long story short, the teacher was shocked at what he saw and heard, paid the rent that was due, obtained a position for the father, and provided the boy with suitable clothing.

The boy attended school regularly thereafter, graduated

in one course, and obtained a position through the teacher. The family moved out of the neighborhood, and the teacher lost all track of them.

About eleven years later, Mr. Y., who had since taken a higher position, was sitting in his office one day when a well-dressed and prosperous-looking gentleman walked in and said: "Mr. Y., you do not know me? I am —, the tailor, whom you helped in a critical period of his life. I have been trying for a long time to locate you in order to express my gratitude and to repay you, so far as I can, what I owe you." He produced a large roll of bills — some \$400 or \$500 — which he had drawn from the bank, to present ocular proof that he was prosperous. He repaid every cent of the money advanced to him, and stated that he had a little home in another borough and that his family were in good health and circumstances. By dint of steady work and some careful investments he had accumulated what to him was quite a fortune. His boy was in business for himself and had recently married.

Mr. Y., who had long ago forgotten the episode, then realized that he had builded better than he knew, and that the teacher's influence may extend far beyond the walls of a classroom and work for good in the larger sphere of life beyond.

Another story even better illustrates the influence the tactful teacher may have in the tenement home. One day a girl, ragged, dirty, disheveled, was brought into a class taught by a bright young teacher who had already become noted for her success with foreign children. Leah, for that was the girl's name, could speak no English. She at once manifested, however, a strong liking for her teacher and,

drawn by this affection, mastered the intricacies of English speech in an incredibly short time. As soon as she could make herself understood, she would lie in wait for her teacher and walk with her part of the way home. Slowly at first, more rapidly afterward, Teacher began to drop hints as to how Leah's personal appearance might be improved. Every hint was acted on, and soon Leah began to wash her face and comb her hair, to tie and polish her shoes, and to have her clothes clean and neatly mended and held in place by hooks and eyes instead of pins. One day when they came to the door of the tenement where Leah lived, Teacher expressed a desire to make a call on Leah's mother. The sight that met her eyes was not a pleasant one. The family contained many children of whom Leah was the eldest, and there were two boarders besides, all domiciled in two rooms. Out of a confused mass of bedding, children, rickety furniture, and broken cooking utensils, rose the inevitable sewing machines out of which the family earned a living and was doubtless saving money. In subsequent afternoon walks, Teacher began to throw out suggestions as to how Leah might reform the home. Leah immediately set to work. The mother regarded Leah's doings askance, but nothing could withstand her enthusiasm, and she soon won her father's strong support. The boarders were turned out. Another room was hired. The rooms were cleansed and put in order. Even the small brothers and sisters were subjected, at first greatly to their disgust, to the scrubbing brush, and were obliged to learn how to comb their hair. About this time Teacher loaned Leah an illustrated magazine. It contained a picture of a dinner table set with silver and cut glass and gar-

nished with flowers. By this time Leah had learned to cook in the cooking class. With the picture as her guide, a new and bolder scheme than any yet imagined, entered her little brain. There must be a dinner table with a white cloth and garnished as nearly as possible like the picture. When this triumph was complete, Leah wrote a note which her father signed inviting Teacher to dinner. Teacher accepted the invitation. What a change met her eyes! Instead of the squalor of her former visit, she beheld the neatness of a poor but well-ordered home. The father and mother were a bit stiff in their reception, because they had but a few words of English, but they treated Teacher with all the reverence due to a queen. And she was a queen, for was she not to those poor Russian Jews the incarnation of American civilization?

Thousands of teachers, God bless them! are doing work of this kind in New York City. Perhaps those are doing it best who fill the school with the best spirit of our age — the spirit of social coöperation. One of my district superintendents furnishes me with an account of a class in which this spirit is abundantly illustrated: —

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Opening the door of the classroom I heard the busy hum of industry. Near the desk sat Miss X., surrounded by a group to whom she was explaining some faults of composition they had made in common. These I learned later were the backward pupils who most needed the teacher's individual help. The rest of the class were working in groups of two each — a bright and a moderate pupil. It was a most animated exercise. Every two pupils were reading and correcting a composition written by one of them. Each in turn had the double benefit of his own criticism and that of his associate. When the teacher became disengaged, a pair of eagerly throbbing hands called for judgment on some disputed point, and this would at times involve a second discussion between teacher and pupils. The aim and its success in operation were equally obvious. The pupils were in the modern spirit of social coöper-

ation, striving to find the truth. There was no copying, no suggestion of impertinent monitorial supervision. In aiding, each was learning.

When there is such a manifestation of personality in the teacher, the school is not merely a preparation for life. It is life.

And what a power a principal may be who sets teachers an example in filling the school with the spirit of social coöperation ! A gifted principal writes me :—

I began my teaching career in a school entirely devoid of ideals for anything beyond the hard facts of the textbook. The contrast between this and a school where the child was looked upon as God's choicest gift, revealed to me not alone the dignity of the teacher's calling, but its tremendous responsibility.

The tenement home, it is scarcely necessary to say, breeds many bad boys. Nowhere is the teacher's personality more clearly revealed than in dealing with such boys. I asked the principal of a large school attended almost exclusively by Italians — a race prolific in unruly boys, at least in America — to write me the characteristics of the teachers who were most successful in dealing with such cases, and he writes this :—

There are at least two characteristics of these teachers. These, if I read them rightly, are a rare degree of sympathy with children and an equally rare sense of justice. Not the sympathy which makes the man reason like the child, but the sympathy by which he is able to see with the child's eyes, and at the same time with his own clearer vision. Not the justice which treats all alike, but the higher justice which makes a difference.

How quickly sympathy will act was recently told me by one of my associates : An incorrigible boy on his return from the truant school to his class struck a classmate in the eye, and fled from the building. At the close of school the principal went to the home of the boy. On approaching the house, the boy fled to a proper distance, but on the

assurance of the principal that he did not propose to arrest him, or punish him, or allow any one else to do so, the boy led the way to his mother. The mother was exceedingly angry at the boy and urged the principal to give him a sound thrashing, saying that she herself would punish him as soon as the principal left. The principal told her that he should do nothing of the kind, that he would not allow him to be sent to the truant school again, and that if she undertook to punish him he would make trouble for her. He assured the mother that he wished the boy to return to school and promised to do everything that he could to help the boy to be a man. The principal assured the boy that if he would come to school the next day he would receive a very cordial welcome; that he would help him in every way to keep up with his class work. After a further conference in this line, the boy agreed to return to school the next day. The attitude of the principal, his assurance that he would help him to be a man, proved the making of the boy.

Repression and fear are rapidly being eliminated as factors of control in the New York schools. The favorite and perhaps the most successful plan of managing a bad boy is when a teacher with sympathetic insight discovers some natural aptitude or liking, finds occupation of that nature and builds upon the foundation thus laid. I have collected many examples of boys made over through some fitting employment or the acceptance of some responsibility which they enjoyed. Myra Kelly's "monitor of the goldfish" is the type. A few days ago an unmistakable son of Italy entered my office. He held a parcel done up in paper in one hand; with the other he handed me a note. The note,

which was from his principal, told me that the boy had been the worst she had ever met in a long experience — disobedient, violent, and apparently incapable of learning. This term, however, he came under the care of a teacher who discovered that Giovanni had a passion for making things. She set him to making baskets. He was no longer troublesome and was learning rapidly. The paper parcel contained a beautiful piece of basketry in vase form which showed the touch of the natural artist.

We are only beginning, I believe, to realize the influence athletics may have in reclaiming unruly boys. The great prominence given to athletics during the past few years in the New York schools has afforded an opportunity to test this means of school discipline. I have no hesitation in saying that athletics rightly used not only improves the carriage, increases physical power, and develops moral energy, but is a vital force in reducing otherwise unmanageable boys to terms. This example will suffice : —

J. H., a boy of fourteen, was known in school parlance as a "terror." He had passed from one teacher to another, not by way of promotion, but mainly with the hope of finding the teacher who could pick out and develop his latent ability. In the course of events he came under the guidance of Miss Blank — his last chance. He entered just before recess of the day I visited Miss Blank. At recess the boys were busy with athletics. J. H. stood by with the sneering face he usually presented for things meaning effort. Regardless of this, he was placed in the group of smaller boys for the broad jump. Possibly to show his superiority, he jumped in turn and clearly out-classed every boy in his group. The teacher encouraged

this and carefully watched him, and every time his work outclassed his group he was placed in the next. He was promoted thus, until one day he led the group of largest boys. J. H. was very quiet for the rest of the day. In the afternoon he actually tried some of the regular class work. It had been a new experience for him to lead in anything requiring effort. He had neglected his opportunities so long that the possibility of surpassing any one else had never entered his mind. Through this interest the teacher aroused interest in his studies and helped him after school every day. In the spring, a basket-ball team was started at his school and J. H. was elected captain by the team as an expression of their admiration of his athletics.

Only once did J. H. backslide. Then his teacher firmly took from him his honors as captain and leader in athletics for one month. He went through the usual "I don't care" of other days, but he did care, and before the term of punishment was up, he was begging his teacher to shorten his banishment by extra good behavior. J. H. was promoted that term. He is now a useful member of society and in business—another living example of a teacher's unselfish work.

But boys are not the only offenders in school. It is, alas! not uncommon to meet with depravity in girls. A principal tells me this story of one of her teachers: Over two years ago there was in this teacher's class a young girl whose life was one of degradation. Her family and home were low in every respect. A visit to the family convinced this young teacher that nothing could be gained there. A series of dreadful incidents occurred, foreshadowing murder and suicide. The young teacher, at great

risk to herself, but through this wonderful power she possesses, averted both, though the girl was expelled from the school. Not yet discouraged, Miss —— went to those in authority and had the girl readmitted. Then the teacher induced the girl to leave her home, and found employment for her with friends. She has won their respect, for they report her a very quiet, refined young woman. Though she has left her family, she still contributes to their support, and is now engaged to be married to a very estimable young man.

This young teacher still keeps in touch with the girl. Her personal power is far-reaching and forcible. Her personality is very attractive, but a strong will that dominates her every act is the striking characteristic of this personal power.

Here is a story, in her own words, which a girl, regenerated through the influence of a noble teacher, has written to one of my principals: —

At the time I came under the influence of this teacher, I was an unhappy, self-willed girl, who blundered continually. I knew my faults, but I had neither the ability nor desire to correct them. Sometimes I tried to force myself to do right, but it seemed like trying to climb a soft, steep gravelly bank. I kept sinking and slipping back at every effort to go forward.

I recognized in this teacher a woman who was at once strong and gentle, firm and kind, noble and human, strict and sympathetic, wise and simple, powerful and controlled. Above all, she was a person of high moral standards.

As I became used to her type of excellence, I felt its beauty more and more, and she began to have a wonderful influence over me, which never lost its effect. She did not realize her power; she was simply living in her usual way. But I knew I had found a friend who would help me out of the misery and danger of despair.

My blunders brought me before her, as an almost unimpressionable case. She had given me help; I knew what to do, but I seemed powerless. I could not make myself do right. She bore with me patiently, but one day she called me to her room and talked with me. I do not remember three

sentences of it now. All that I was conscious of was that I was receiving an electric treatment of personality — a noble, magnificent character was revealing itself to me. I was speechless with wonder and awakening.

She had trusted me and I had done wrong and deserved severe treatment. But she chided me without temper, rashness, or personal remarks. She was beyond the reach of my wrong doing, but still she was honestly grieved by my foolish ways and disappointed at my weakness.

Incorrigible as I had been, I was reached, for there was something in her gentle, firm tone and steady, searching look that offered hope and courage; something in that magnetic, sympathetic personality that urged me to brace up, go forward, and conquer the past mistakes, and live according to higher standards. That woman ennobled my life.

"I still," adds the principal, "have this young woman under observation, and I know that the effect of this teacher on her life is permanent."

Marshall, in his monumental work on "Political Economy," tells us that probably one half of the talent and genius born into this world finds its manifestations in the lower ranks of society. If so, what a responsibility rests on the public school teacher to discover and encourage talent! I remember how an old lady who was principal of a school in a poor neighborhood in Brooklyn often told me how she discovered budding dramatic talent in a little madcap of a girl who afterwards became the bright particular star of the American stage, as Ada Rehan. But why dwell on the shining examples? Let me rather relate, in the words of one of my district superintendents, the work of a man who was singularly successful in inducing boys to go on to the high school after completing the work of the elementary school.

This teacher, Mr. X., had a graduating class in a crowded section of the city. Without exception his pupils were poor, but as a class, responsive and appreciative.

His assumption, as graduating class teacher, was that no

elementary school instruction was sufficient to fit a boy for modern life, however able or successful had been the men who lacked even so much. His problem was so to appeal to the understanding and emotion of his pupils that they would feel as he did and make that feeling a motive to activity in their lives. Some he influenced immediately; the restless ones who wished to "go to work" he won over before the term had closed. His power lay less in the definite reasoning and appeal he made than in the confidence he had inspired. There lay his strength and power.

.But however he might influence their desires for better education, there was a more formidable obstacle. These children were poor, and poverty shrinks neither before argument nor appeal. With many of them that last year at school had been a painful story of sacrifice at home. Some of the boys knew from a more fearsome dictionary than books, the meaning of cold and hunger and neglected illness. He had kept them well together with that goal of childish triumph before them—the graduation day and the school certificate—but for the subsequent schooling he had no such incentive.

If poverty cannot be talked down, it may be challenged and fought. He proposed schemes of industry to tide them over: the evening paper stand, the afternoon delivery for the corner store, the early morning route, these and other devices were tried and employed.

Then the parents, too, were sent for and questioned. Even among those who seemed the poorest, it is often thrift, even at times avarice, that takes the child away from opportunity. To the skeptical Mr. X. explained the value in material dividends that a year or two more of

instruction might give. To the imaginative and emotional he painted the loving tribute of gratitude that would bless their old age, for one more sacrifice of effort and denial. He was not less fertile in appeal, if appeal might win, than in practical suggestion.

The result was that the great majority of his pupils bound themselves to begin a course of secondary instruction. He tells me that at graduation one boy was working from four o'clock in the morning till school time ; one labored at night in a cracker bakery ; another delivered parcels both before and after school, and several had their round of customers for newspapers. In such humble ground he planted seed that might some day yield the laurel.

Circumstances subsequently necessitated his transfer to another part of the city, and he lost sight of his charges. Recently, however, he met two of them, and shortly after others called upon him. Without exception they had done well. One is an instructor in a school of technology, three are teachers, three others are completing a course in law school, and two have already begun practice. They have kept the old class spirit together and, as the teacher informs me, recently met to arrange a reunion with a single honored guest — himself.

This man would not tolerate the arguments of those who claim that the majority of boys will be just as "successful" without as with a high school education. To all such he made answer : " My work here is to do what I can to put these boys in the way of getting all that the skill and wisdom of the schools can yield in preparing them for the best of life. I wish to see them whole men."

There is no more useful manifestation of personal power

than that of the man or woman who stimulates to the higher culture and who guides the student in the direction indicated by his natural aptitude.

Perhaps you think I have given too little attention to the purely scholastic side of our work. If so, let me sketch for you two teachers whose personal power is manifested in opposite ways. One is Miss C., a high school teacher of history. Who that has seen her can forget her? Her dress, her voice, her speech, her gestures, her black eyes — all attractive. She holds her pupils spellbound. Their attention never wanders for a second. What she wills them to do they do. She questions them as Socrates might have done, leading them to see how ignorant they were in their first state and then how well informed they may be if they will but reason logically. She dismisses them with three topics to look up for the next day and with suggestions regarding the particular bookshelves on which helpful books may be found. The pupils will be sure to do plenty of reading and thinking in preparation for the next lesson, for they know that Miss C.'s questioning will turn them inside out. She does not merely question. When she receives a good answer, she adds to it, painting in a few brief sentences a picture that will remain in the pupils' minds.

The second teacher is a teacher of psychology in a normal school. His pupils sit in a circle with him. He does not say more than a dozen sentences. The pupils seldom give him a glance. They conduct the conference themselves as any party of friends might talk together at the fireside. The subject is the will. A young woman begins to talk as soon as the bell sounds, saying that she will go

on with what she and her friend have found out about the subject. At her first pause two or three are ready with questions, objections, or comments. Nearly every one has something to say, but as this young woman has evidently obtained permission from the class to present this particular topic, she is regarded as the leader for the time being, and is consequently appealed to or challenged by the others. The teacher speaks only when it becomes necessary to say that such and such a point had been a matter of dispute for ages. When he speaks it is always with deference to the leader, and the pupils give him only as much attention as they give to one another. The teacher, when asked, cannot tell me what the topic for the next lesson will be—his pupils have not informed him. They study the whole subject of psychology in this way, using no one textbook, but having access to many, selecting their own topics, conducting their own oral examinations, rating themselves, calling on him only when they are “stumped.” He shows his remarkable power in keeping himself from interfering, though he is really guiding all the time that the pupils seem to be acting independently.

I have tried to sketch many different types of teachers who have evidently great personal power. Who shall analyze it? Who shall determine the common elements? I shall not attempt the task. The possessor of personal power does not know what it is. He only knows that the virtue is in him. We only know that all great leaders of men have had it in a marked degree. We see its manifestations in the reactions of pupils. Thrice blessed is he who is permitted to see that these reactions are good and not evil, and that they make for “manners, virtue, freedom, power.”











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